

Changes in Infant Mortality and Related Rates by Health Service Area: 1969-73 to 1974-77

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Introduction

The uses of infant mortality data for health planning at the local level were discussed in Statistical Note for Health Planners No. 2.¹ Its associated data supplement² provided infant mortality rates by health service area for 1969-73 and 1974-75. These data have been updated through 1977 for the present Note, which provides additional perspectives on the geographic variation characterizing infant mortality in the United States over this time period. Examples are presented to illustrate the strategies health planners can employ to identify geographic areas with extreme rates and assess changes in these rates over time.

The usefulness of infant mortality data for small areas is limited by the stability of the rates. As an estimate of the underlying rate, the observed infant mortality rate is always subject to some degree of chance variation, depending on the number of births and deaths under consideration. Aggregating data for several years, as done in this Note, augments stability but tends to diminish the timeliness of the data.

A recent Note (No. 12) explored the potential for using data based entirely on the birth distribution (i.e., maternal characteristics such as low education and late prenatal care) to evaluate infant mortality. For health planning at the local level, this approach generally employs estimates that are more stable than direct measures of mortality. Natality indicators are also useful for assessing the maternal risk dimension of infant mortality. However, analysis must eventually encompass measures of outcome—for instance, mortality—in addition to variables that are associated with outcome.

It should be noted that mortality is not the only useful measure of pregnancy outcome. Certain characteristics of the infant can be considered as outcome variables. Low birth weight and gestational

age are both highly correlated with infant mortality and morbidity. Any analysis of infant health should consider the role of these factors on pregnancy outcome. A forthcoming Note covering data on birth weight will further expand the analytic potential of the data presented here.

Thus the data and methodology presented in this Note can be viewed as a component of a broader plan for evaluating infant mortality with small-area data. The Rand algorithm on infant mortality³ provides details of a step-by-step approach that carries analysis from problem recognition through intervention and evaluation.

Presentation of data

Three measures of infant mortality are shown on the attached computer printout: the infant mortality rate, the neonatal mortality rate, and the postneonatal mortality rate. All are average annual rates that relate deaths during the specified period to 1,000 live births during the same period. The rates are defined as follows:

Infant mortality = rate	$\frac{\text{Number of deaths to infants under 1 year of age}}{\text{Number of live births}} \times 1,000$
Neonatal mortality = rate	$\frac{\text{Number of deaths to infants under 28 days of age}}{\text{Number of live births}} \times 1,000$
Post-neonatal mortality = rate	$\frac{\text{Number of deaths to infants between 28 days and 1 year of age}}{\text{Number of live births}} \times 1,000$

Race-specific measures (1 = total, 2 = white, 3 = black, and 4 = other) are presented for each health

service area for the two time periods 1969-73 and 1974-77. Data for 1969-73 published in this Note differ slightly from data for this time period previously published in the Statistical Note series. The health service area (HSA) designations have changed somewhat (see page 10), and data in the race category "all other" are now presented separately "black" and "other."

For each race-specific rate, HSA's were ranked relative to all other HSA's. If two or more areas had the same value, the ranks were averaged. HSA's with fewer than 1,000 live births in a race group were not included in the ranking due to the large random error associated with small numbers; the rank column shows "NA" (not applicable) for cases in which the rank was not calculated.

The ratio of the 1974-77 rate divided by the 1969-73 rate is provided as a measure of change. The ratio expresses the more recent rate as a proportion of the earlier rate. Since it is a measure of relative change (or relative risk), a ratio is generally considered a more useful means to assess change than the absolute difference in rates. Changes in rates are also discussed in terms of percentage declines or increases. They can be easily obtained from the ratio by using the following formula: Percentage change = $(\text{Ratio} - 1) \times 100$. (See Statistical Note No. 2 for a more detailed discussion of ratios and related measures.) A value of 1.00 indicates no change, whereas a ratio of .60 shows that the 1974-77 rate is only 60 percent of the 1969-73 rate—that is, the rate declined by 40 percent. A ratio greater than 1.00 represents an increase in the rates over this time period.

Geographic variation

The geographic variation in infant mortality among HSA's provides a context for interpreting both the level and change in infant mortality for an individual HSA. The geographic distribution of the rates will also be examined to determine whether the steady decline in U.S. infant mortality rates since 1965 (about a 5-percent decrease per year for both blacks and whites) has resulted in smaller differences among HSA's. Since black infant mortality is about twice as high as that for whites and since there is substantial geographic variation in the proportion of births to black women, the analysis of geographic variation is race specific.

Infant mortality rates at the State and regional level seem to have continued a pattern of substantial geographic variation since the mid-1960's. In 1975-77, both white and black infant mortality rates were about 50 percent greater in the States with the highest rates than in the States with the lowest rates.⁴

A study of rates for smaller geographic areas was conducted by Kleinman, Feldman, and Mugge.⁵ Their comparison of patterns of infant mortality and related rates across State economic areas showed considerable geographic variation in both 1961-65 and 1969-73. Variation in the postneonatal rates decreased over this time period, but the variation in the neonatal rates increased, yielding a net effect of no consistent change in variation for the infant mortality rate.

Analysis of geographic variation among HSA's in 1969-73 and 1974-77 shows that variation remained the same for white rates. For black rates, geographic variation in neonatal mortality increased, and variation in postneonatal mortality decreased. The net result was a slight increase in geographic variation for infant mortality. Although geographic variation in infant mortality rates did not decrease, the relative position of different areas changed. In other words, there was a fair amount of geographic variation in the rate of change between 1969-73 and 1974-77. Examples will be discussed later in this report.

Distribution of rates

The percentile distributions of the observed infant, neonatal, and postneonatal mortality rates for 1969-73 are provided in table A. Corresponding distributions for 1974-77 are given in table B. The percentile values are the values below which a given proportion of the HSA's will be included. For example, table A shows that the 90th percentile value for the infant mortality rate for white births is 19.5. This indicates that 90 percent of the HSA's had fewer than 19.5 infant deaths per 1,000 births during the period 1969-73.

The percentile values for the associated ratios of change for these infant mortality rates are provided in table C. Here the 90th percentile value for the distribution of ratios of white infant mortality rates is shown to be .73. This indicates that 90 percent of the HSA's had a 1974-77 to 1969-73 ratio of greater than .73 or, to express this in terms of percent decrease, a decline of less than 27 percent [i.e., percent = $(.73 - 1) \times 100$]. The 30th percentile for the distribution of ratios of black postneonatal mortality rates is .90. This indicates that 30 percent of the HSA's had ratios above .90, or had a decline of less than 10 percent in their postneonatal mortality rates. When converting from the ratio to percent reduction, remember that the higher the ratio, the lower the reduction.

As indicated by the low correlation coefficients shown in table D, HSA's with high infant mortality rates for white births do not necessarily have high

Table A. Percentile distribution of infant, neonatal, and postneonatal mortality rates by race: U.S. health service areas (HSA's), 1969-73¹

Percentile	Total ²			White			Black		
	Infant mortality rate	Neonatal mortality rate	Postneonatal mortality rate	Infant mortality rate	Neonatal mortality rate	Postneonatal mortality rate	Infant mortality rate	Neonatal mortality rate	Postneonatal mortality rate
5.	15.1	11.2	3.5	14.6	11.0	3.1	23.5	14.8	5.4
10.	16.0	11.7	3.7	15.1	11.5	3.2	25.7	17.5	6.6
20.	16.8	12.6	3.9	15.7	11.9	3.5	27.0	18.7	7.4
30.	17.4	13.1	4.2	16.5	12.4	3.8	28.2	19.8	7.9
40.	18.2	13.6	4.4	16.8	12.8	3.9	29.6	20.5	8.4
50.	18.9	14.2	4.7	17.3	13.4	4.0	30.8	21.3	8.9
60.	19.6	14.6	5.0	17.8	13.7	4.1	32.0	22.1	9.4
70.	20.5	15.3	5.2	18.4	14.1	4.3	32.9	23.1	10.1
80.	21.2	15.9	5.8	18.9	14.4	4.7	34.0	24.3	10.8
90.	22.6	16.6	6.5	19.5	15.1	5.0	35.9	25.4	12.6
95.	24.1	17.2	7.4	20.4	15.7	5.3	38.0	26.6	13.8
Number of HSA's	202	202	202	202	202	202	158	158	158
U.S. total.	19.3	14.3	4.9	17.1	13.1	4.0	31.1	21.6	9.6

¹Includes HSA's with at least 1,000 births in the specified race group in 1969-73.

²Includes persons of all races.

Table B. Percentile distribution of infant, neonatal, and postneonatal mortality rates by race: U.S. health service areas (HSA's), 1974-77¹

Percentile	Total ²			White			Black		
	Infant mortality rate	Neonatal mortality rate	Postneonatal mortality rate	Infant mortality rate	Neonatal mortality rate	Postneonatal mortality rate	Infant mortality rate	Neonatal mortality rate	Postneonatal mortality rate
5.	12.0	8.3	3.1	11.5	8.1	2.7	17.6	11.5	4.6
10.	12.5	8.7	3.3	12.0	8.5	2.9	19.5	12.3	5.6
20.	13.3	9.5	3.6	12.6	9.1	3.2	21.5	14.6	6.3
30.	14.1	10.1	3.8	13.2	9.5	3.4	23.1	15.7	6.8
40.	14.5	10.5	4.0	13.4	9.9	3.5	23.9	16.5	7.1
50.	15.0	10.9	4.2	13.8	10.1	3.6	24.6	17.4	7.4
60.	15.8	11.4	4.4	14.0	10.4	3.8	25.8	18.2	7.9
70.	16.3	11.7	4.7	14.5	10.6	4.0	27.1	18.8	8.3
80.	17.2	12.3	5.0	14.9	11.0	4.2	28.5	19.9	9.2
90.	18.5	13.3	5.5	15.6	11.6	4.6	30.1	21.3	9.8
95.	19.5	14.0	6.0	16.4	12.2	4.8	32.0	22.7	10.6
Number of HSA's	202	202	202	202	202	202	156	156	156
U.S. total.	15.5	11.1	4.4	13.7	10.0	3.7	25.5	17.7	7.8

¹Includes HSA's with at least 1,000 births in the specified race group in 1974-77.

²Includes persons of all races.

Table C. Percentile distribution of ratios¹ of infant, neonatal, and postneonatal mortality rates by race: U.S. health service areas (HSA's)²

Percentile	Total ³			White			Black		
	Infant mortality rate	Neonatal mortality rate	Postneonatal mortality rate	Infant mortality rate	Neonatal mortality rate	Postneonatal mortality rate	Infant mortality rate	Neonatal mortality rate	Postneonatal mortality rate
5.....	.93	.95	1.07	.92	.91	1.11	1.00	1.05	1.27
10.....	.89	.89	1.01	.89	.86	1.07	.96	.98	1.10
20.....	.84	.84	.97	.84	.83	.99	.90	.92	.97
30.....	.82	.81	.94	.83	.80	.97	.87	.87	.90
40.....	.81	.79	.91	.81	.78	.94	.85	.84	.86
50.....	.80	.78	.89	.79	.76	.91	.81	.81	.82
60.....	.79	.75	.86	.78	.74	.89	.79	.80	.79
70.....	.77	.73	.83	.76	.72	.85	.76	.77	.74
80.....	.75	.72	.81	.74	.70	.82	.72	.70	.68
90.....	.73	.69	.77	.73	.67	.78	.67	.63	.64
95.....	.71	.66	.73	.71	.65	.75	.62	.60	.57
Number of HSA's.....	202	202	202	202	202	202	156	156	156
U.S. total.....	.80	.78	.90	.80	.76	.93	.82	.82	.81

¹1974-77 rate ÷ 1969-73 rate.
²Includes HSA's with at least 1,000 births in the specified race group in both time periods.
³Includes persons of all races.

Table D. Correlations between white and black rates and ratios of infant, neonatal, and postneonatal mortality: U.S. health service areas (HSA's), 1969-73 and 1974-77¹

Time period and type of rate	Correlation coefficient ²	Number of HSA's
1969-73:		
Infant mortality rate.....	.43	158
Neonatal mortality rate.....	.37	158
Postneonatal mortality rate.....	.28	158
1974-77:		
Infant mortality rate.....	.46	156
Neonatal mortality rate.....	.51	156
Postneonatal mortality rate.....	.21	156
Ratio ³ of:		
Infant mortality rates.....	-.07	156
Neonatal mortality rates.....	.08	156
Postneonatal mortality rates.....	-.01	156

¹Includes HSA's with at least 1,000 births in each race group in the specified time period.
²Pearson product-moment correlation coefficient (r).
³1974-77 rate ÷ 1969-73 rate.

Table E. Health service areas with white and black infant mortality rates or percent change in rates at opposite extremes¹ of the distribution: 1969-73 and 1974-77²

Health service area	1969-73 rate		1974-77 rate		Percent change in rates	
	White	Black	White	Black	White	Black
CAL 10..					High	Low
COL 02..			High	Low		
DC 02..					High	Low
FLA 03..					High	Low
GA 02..	High	Low	High	Low		
ILL 03..					High	Low
ILL 04..					High	Low
ILL 05..					Low	High
KY 02..	High	Low	High	Low		
MD 02..					Low	High
MIC 06..					Low	High
NJ 02..					Low	High
NJ 05..	Low	High				
NY 03..					Low	High
OH 06..			High	Low		
PA 07..			High	Low		
WAS 01..					Low	High
INT 03..					Low	High

¹In the highest or lowest quintile of the distribution.
²Includes HSA's with at least 1,000 births in each race group in the specified time period.

rates for black births. Furthermore, the correlation between white and black change ratios is essentially zero; that is, an HSA's change in white infant mortality is unrelated to its change in black infant mortality for the time period under study.

Table E presents a list of HSA's that had white and black infant mortality rates or ratios at the opposite extremes of the distributions. The highest and lowest quintiles determined the cutoffs for inclusion, and only HSA's with at least 1,000 births

in each race group were considered. This list demonstrates that the difference between the white and black ratios of change in an HSA is likely to be greater than the gap between white and black infant mortality rates in that HSA for either the 1969-73 or 1974-77 period.

Confidence intervals

Confidence intervals should be calculated in order to assess the stability of an area's mortality rate or its change ratio. The formula for calculating the standard error for an infant mortality rate is:

$$SE(r) = r \times \sqrt{\frac{1}{d}}$$

where r = rate (infant mortality, neonatal mortality, or postneonatal mortality)

d = number of deaths

The attached computer printout shows rates per 1,000 and number of births for each HSA. Since

$$d = \text{births} \times r/1,000,$$

an equivalent formula for the standard error is:

$$SE(r) = r \times \sqrt{\frac{1,000}{rb}} = 31.623 \times \sqrt{\frac{r}{b}}$$

where r = rate per 1,000

b = number of births

Using black births in ALA 01 as an example, the standard error for the 1974-77 infant mortality rate is:

$$SE(IMR = 28.4) = 31.623 \times \sqrt{\frac{28.4}{6,050}} = 2.17$$

The 95-percent confidence intervals are calculated as follows.

$$\text{Lower limit: } r - 1.96 \times SE(r)$$

$$\text{Upper limit: } r + 1.96 \times SE(r)$$

For the 1974-77 black infant mortality rate in ALA 01, these limits are—

$$\text{Lower limit: } 28.4 - (1.96 \times 2.17) = 24.1$$

$$\text{Upper limit: } 28.4 + (1.96 \times 2.17) = 32.7$$

Turning to table B, it can be seen that this confidence interval is fairly broad. The observed rate fell just below the 80th percentile, whereas the confidence interval extends from below the 50th to above the 95th percentile. Thus, without additional years of data, it would not be advisable to conclude that this HSA's black infant mortality rate for 1974-77 was higher than that of the majority of HSA's.

Confidence intervals for the ratio of two independent rates are best approximated by calculating

the interval in the log scale and then taking antilogarithms.^a The following formulas should be used.

Standard error.—

$$SE(\ln(R)) = \sqrt{\frac{1}{d_1} + \frac{1}{d_2}} = \sqrt{\frac{1,000}{r_1 b_1} + \frac{1,000}{r_2 b_2}}$$

where $\ln(R)$ = natural logarithm of ratio of two independent rates (e.g., 1974-77 IMR ÷ 1969-73 IMR)

d_1 = number of deaths for time period 1 = $r_1 b_1 / 1,000$

d_2 = number of deaths for time period 2 = $r_2 b_2 / 1,000$

Confidence intervals.—

Lower limit: $\ln(R) - 1.96 \times SE(\ln(R))$

Upper limit: $\ln(R) + 1.96 \times SE(\ln(R))$

The confidence interval for the ratio itself can be obtained by taking the antilogarithm of these lower and upper limits (e^{L_L} and e^{U_L}).

Note that the stipulation that the rates be "independent" means that the births and deaths that make up one rate are not included in the other rate. Thus these formulas are appropriate when the ratio relates to either nonoverlapping years or geographic areas.

To continue with the ALA 01 example, the ratio for the black infant mortality rate is .96. Table C shows that only 10 percent of the HSA's had such a small change in rates. The 95-percent confidence limits for the natural logarithm of this ratio (-.04082) are calculated as follows.

$$SE(\ln(R)) = -.04082 =$$

$$\sqrt{\frac{1,000}{29.6 \times 8,647} + \frac{1,000}{28.4 \times 6,050}} = .09864$$

$$\text{Lower limit: } -.04082 - (1.96 \times .09864) = -.23416$$

$$\text{Upper limit: } -.04082 + (1.96 \times .09864) = .15252$$

The antilogarithms of these numbers, which are the confidence limits for the ratio itself, are as follows.

^aUsing the logarithms rather than the ratio insures that the confidence interval will be the same regardless of which rate is included in the denominator of the ratio.

Lower limit (*R*): $e^{-.23416} = .79$

Upper limit (*R*): $e^{.15252} = 1.16$

Since this confidence interval extends from below the 5th to the 60th percentile (see table C), all that can be inferred about ALA 01's change is that it was not among the most favorable.

Case study

Perhaps the uses of infant mortality data and related measures can best be illustrated by examining an actual situation. Considerable public attention and resources have recently been directed at finding ways to reduce infant mortality in the District of Columbia. The District has traditionally had high rates of infant mortality because of its racial composition, but recent trends indicate a worsening of the situation. Since 1970, the District has had one of the highest rates of black infant mortality among large U.S. cities.⁶

As part of the effort to lower infant mortality in the District of Columbia, various groups of researchers, health planners, and administrators were called together to investigate the problem and propose solutions. These working groups included the Blue Ribbon Committee on Infant Mortality, designated by the mayor of the District of Columbia, and a U.S. Public Health Service task force comprised of representatives of several government agencies.

On May 7, 1980, hearings were held before the committee within the House of Representatives which has oversight responsibility for the District of Columbia. The data in this Note can be used to reconstruct some of the findings brought out at this hearing. First, a cross-sectional look will be taken at the 1974-77 infant mortality rates for D.C. and the

Table F. Infant, neonatal, and postneonatal mortality rates, corresponding rank, and number of births by race: United States and the District of Columbia, 1974-77

Rate and rank	United States		District of Columbia	
	White	Black	White	Black
Infant mortality:				
Rate	13.7	25.5	16.6	29.1
Rank	NA	NA	193	134
Neonatal mortality:				
Rate	10.0	17.7	13.8	22.7
Rank	NA	NA	199	148
Postneonatal mortality:				
Rate	3.7	7.8	2.8	6.4
Rank	NA	NA	17	33
Number of births . .	10,386,472	2,077,443	5,719	33,382

comparable U.S. figures. These data have been extracted from the attached printout and are shown in table F. The gap between white and black rates, although large, appears to be no greater in the District than for the total United States. Comparison within each race group, however, reveals that black infant mortality is about 14 percent higher than the U.S. average for blacks, and neonatal rates are about 28 percent higher. A similar pattern seems to emerge for white births. For both races, the postneonatal mortality rate is lower in the District than for the entire United States.

In order to assess the stability of these rates for the District, the confidence intervals were calculated using the formula given earlier:

	White	Black
Infant mortality:		
Lower limit	13.3	27.3
Upper limit	19.9	30.9
Neonatal mortality:		
Lower limit	10.8	21.1
Upper limit	16.8	24.3
Postneonatal mortality:		
Lower limit	1.4	5.5
Upper limit	4.2	7.3

These confidence intervals must now be checked against the appropriate percentile distributions in table B. The wide confidence intervals for the infant and postneonatal rates for white births preclude drawing definite conclusions, although there is some indication that white neonatal mortality rates are higher than those of other HSA's. (It should be noted that the white rates are based on a relatively small number of births.) However, the original observations regarding the black infant mortality rates are supported. The lower limit for neonatal mortality is just below the 90th percentile, whereas the entire confidence interval for postneonatal mortality remains below the 50th percentile. Thus D.C.'s problem is with its neonatal rates, which are greater than those of almost 90 percent of the HSA's.

Since only about 15 percent of births in the District of Columbia are white and the white estimates are somewhat unstable, the investigation will continue for black births only. Neonatal mortality data for an earlier time period, 1969-73, will be looked at next.

Black neonatal mortality:	
Rate	22.0
Lower limit	20.8
Upper limit	23.2
Rank	94

Although the confidence interval for the black neonatal mortality rate in 1969-73 extends to just above the 70th percentile, its rank of 94 out of 158 indicates that the D.C. rate was about average. The change in rank to 148 out of 156 in 1974-77 demonstrates that the black neonatal mortality rate slipped from being average to poor during this time. This is reflected by the change ratio:

Ratio	1.03
Lower limit .....	.94
Upper limit	1.13

The ratio indicates that there was virtually no change in the District's black neonatal mortality rate. Since the lower limit falls below the 30th percentile, it can be concluded that D.C. is one of the minority of HSA's that did not experience a substantial decline in black neonatal mortality. This conclusion is consistent with findings presented at the May 7 hearing:

...The trend in D.C.'s [other than white] neonatal mortality was similar to the national trend until the 1970's when the D.C. rate began to increase. Concentrating on the current decade, we find that the pattern for 1970 through 1977 has been one with no statistically significant deviation from a constant line. This is in marked contrast to

the steady downward trend in the national rate for black neonatal mortality.⁷

A look at maternal risk factors may provide some explanations of these neonatal mortality trends. Table G presents selected measures of risk (based on characteristics of the birth distribution) for the District of Columbia in 1969 and 1977; national averages are also included for comparison. A more detailed discussion of these measures can be found in Statistical Note No. 12.

Comparing D.C. black births with U.S. black births, it appears that the District has a somewhat more favorable age, age-parity, and education profile in both time periods. Although the prenatal care measure is slightly less favorable in the District in 1977, the 37-percent change since 1969 indicates improvement at a faster pace than that experienced by the U.S. black population. The proportion unmarried is the only measure that shows no improvement. As noted by a member of the Data Subcommittee of the Public Health Service task force and Blue Ribbon Committee:

For many of these characteristics, blacks in the District of Columbia have shown more improvement between 1970 and 1977 than blacks in the total U.S., but blacks in the total U.S. have had a steady lowering of the infant mortality rate. Why the paradox?⁸

It has been suggested that migration of the "low-risk" population out of the city may contribute to the lack of decline in D.C.'s neonatal mortality rate. For a number of decades, white couples in the childbearing years have moved from the city to the suburbs, and this migration pattern is now being followed by middle-income blacks. Since recent black migrants to the counties adjacent to D.C. tend to be in young families that are better educated and have larger incomes than their city counterparts, black suburbanization may be leaving behind an increasingly large share of women whose babies are at greater risk of neonatal death.

The impact of an unequal distribution of high-risk births should be separated from the impact of other factors. One method for doing this involves adjusting the mortality rates for infant birth weight. As mentioned earlier, low birth weight is a strong determinant of both the mortality and morbidity of infants during the first year of life. However, infant mortality in an area is affected by the birth-weight distribution as well as the chances of survival within each birth-weight-specific category. Natality data show that since 1970 the District has had an increasing incidence of low birth weight among other-than-white births and a much slower decline in birth-weight-specific mortality than the United States as a whole has had. In summary:

Table G. Selected maternal risk measures for black births in the United States and in the District of Columbia, with percent change: 1969 and 1977

Maternal risk measure	Black births		
	1969	1977	Percent change
Percent under 20 years			
United States	31.0	29.7	-4.2
District of Columbia	29.7	26.4	-11.1
Percent high age-parity risk ¹			
United States	65.8	53.4	-18.8
District of Columbia	57.1	48.3	-15.4
Percent unmarried			
United States	245.8	51.7	12.9
District of Columbia	247.7	57.8	21.2
Percent low education ³			
United States	248.5	41.0	-15.5
District of Columbia	238.1	33.5	-12.1
Percent late prenatal care ⁴			
United States	57.3	41.0	-28.5
District of Columbia	66.7	42.1	-36.9

¹Based on the following age-parity combinations: (1) all births to women under 20 or 35 and over, (2) total-birth order 3 or more to women 20-24 years, (3) total-birth order 4 or more to women 25-29 years, and (4) total-birth orders 1 and 4 or more to women 30-34 years.

²Based on 1973 data. (Data for the District of Columbia unavailable for prior years.)

³Less than high school.

⁴After first trimester or not at all.

Statistical adjustments for birth weight patterns show that about half of the differential [in neonatal mortality between the United States and D.C.] is due to the larger proportion of low-birth-weight infants born to District residents relative to the Nation as a whole. The rest of the differential can be attributed to poorer infant survival rates in the District. However, the reasons for poorer pregnancy outcome are, at this time, largely unexplained.⁷

The Epidemiology Unit in the Office of the Commissioner of Public Health has been established within the District of Columbia government for the purpose of pursuing research and intervention strategies to lower infant mortality. It is hoped that more will be learned about the causes of low birth weight and infant death through continued surveillance and study of vital statistics and other health data.

Example of data use

Data for the HSA which comprises the entire State of Mississippi (MIS 01) will next be examined to provide another example of how infant mortality in an area can be assessed. In this case, the ratios of the neonatal mortality rate and postneonatal mortality rate for white and black births will be looked at first to see what changes took place between 1969-73 and 1974-77.

	White	Black
Neonatal mortality:		
Ratio .....	.69	.79
Lower limit .....	.64	.74
Upper limit .....	.74	.84
Postneonatal mortality:		
Ratio .....	.99	.72
Lower limit .....	.86	.66
Upper limit	1.14	.78

Based on the confidence intervals calculated from the formulas given earlier, it can be concluded that the decline of 31 percent in the neonatal mortality rate for white births in Mississippi was greater than that of the majority of HSA's. For black births, the decrease of 21 percent in the neonatal mortality rate appears to be an average rate of decline. On the other hand, the white postneonatal mortality rate decreases only 1 percent (although subject to a wide confidence interval), while the decrease in the black postneonatal mortality rate is greater than that for most of the HSA's.

Next, the levels of the rates in each period are examined.

	1969-73	1974-77
White neonatal mortality:		
Rate	15.7	10.9
Lower limit	15.0	10.2
Upper limit	16.4	11.6
White postneonatal mortality:		
Rate	3.6	3.6
Lower limit	3.3	3.2
Upper limit	3.9	4.0
Black neonatal mortality:		
Rate	24.1	19.0
Lower limit	23.2	18.1
Upper limit	25.0	19.9
Black postneonatal mortality:		
Rate	13.5	9.7
Lower limit	12.8	9.0
Upper limit	14.2	10.4

In 1969-73, the white neonatal mortality rate was one of the highest in the United States, and even the lower limit of the confidence interval for the white rate was above the 80th percentile. The large reduction in this rate improved Mississippi's standing, although even for 1974-77 the upper confidence limit extends into the high end of the distribution. The lack of change in Mississippi's white postneonatal mortality rate was a result of its very low rate in 1969-73, which had become only an average rate by 1974-77.

Mississippi's black neonatal mortality rates in both time periods were in the highest quartiles of the distributions. The large decline in its black postneonatal mortality rate improved its ranking, but since the rate in 1969-73 was extremely high (above the 90th percentile), the rate remained in the highest quartile.

As done in the case study for the District of Columbia, maternal risk factors based on natality data can be examined to help explain the infant mortality trends. For example, Mississippi has a greater than average proportion of births in both races to women with low educational attainment. This points to an area for further investigation. Additionally, the proportions of high age-parity risk births in 1977 (defined according to the same age-parity combinations used in Statistical Note No. 12) are higher in Mississippi than the respective U.S. averages for white and black births. Although Mississippi has experienced a decrease in this measure since 1969 for both races, the decline has been at a slower pace than that for the Nation as a whole.

Summary

The considerable geographic variation in rates of infant mortality in the United States can be used

to identify areas where further attention should be focused. Analysis of vital statistics data by HSA for 1969-73 and 1974-77 indicates that the geographic variation has not decreased. Also, there is a fair amount of variability in the rates at which infant mortality measures changed during this time period.

Data on infant mortality for 1969-73 and 1974-77 are presented on the attached computer printout. The percentile distribution for these rates and their associated change ratios (tables A-C) can be used to determine how an HSA's rate (or ratio) compares to

that of other HSA's across the country. Local area planners are encouraged to assess the stability of the rates and change ratios by calculating confidence intervals.

Finally, two examples are presented to illustrate how problem areas can be identified in terms of both the level and the proportionate change in mortality over time. It is also recommended that analysis of infant mortality in an area be expanded to consider the roles of maternal risk factors as well as other variables such as low birth weight.

References

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⁶Statement by J. M. McGinnis, M.D., Deputy Assistant Secretary for Health (Disease Prevention and Health Promotion), Department of Health and Human Services, Before the Committee on the District of Columbia Subcommittee on Fiscal Affairs and Health, House of Representatives, May 7, 1980.

⁷National Center for Health Statistics: Background Paper on Infant Mortality in the District of Columbia. Prepared for Hearings Before the Committee on the District of Columbia Subcommittee on Fiscal Affairs and Health, House of Representatives, May 7, 1980. Unpublished document.

⁸Findings and Recommendations From the Data Subcommittee, Presented by G. Oakley, M.D., Center for Disease Control, at the Joint Meeting of the Mayor's Blue Ribbon Committee on Infant Mortality and the PHS Task Force on Health in the District of Columbia.

Health service area codes

The HSA codes used in this Note have been modified to be consistent with county boundaries. The codes are the same as those used by the Bureau of Health Manpower to produce the Area Resource File (Version 12). As a result of the redefinition, there are a total of 202 HSA's for which infant mortality statistics have been calculated. This excludes Puerto Rico and other areas which are comprised of small parts of counties which cannot be defined.

The exceptions to the official HSA designations are as follows:

- (a) The States requesting exemption from designating HSA's are redefined as follows:

Official HSA code	Redefined HSA code
None	D C 02
None	HAW 03
None	R I 04

- (b) Interstate HSA's are listed with State name as INT (for interstate) on the last pages of the printout. The 14 interstate HSA's are defined as follows:

Official HSA code	Redefined HSA code
GA 01, TN 03	INT 02
GA 04, SC 05	INT 03
GA 05, AL 07	INT 04
IA 01, NE 04	INT 05
NE 03, IA 02	INT 06
IA 03, IL 10	INT 07
OH 01, KY 03	INT 08
ND 02, MN 01	INT 09
WI 07, MN 02	INT 10
ND 03, MN 03	INT 11
MO 01, KS 04	INT 12
MO 03, IL 11	INT 13
NY 04, PA 08	INT 14
TN 01, VA 06	INT 15

- (c) HSA's officially listed as including parts of counties are redefined to include the following complete counties:

Official HSA code	Counties included
AK 01	All divisions in Alaska
AZ 01	Gila, Maricopa, Pinal
AZ 02	Cochise, Greenlee, Pima, Santa Cruz, Graham
AZ 03	Coconino, Yavapai, Apache, Navajo (includes AZ 04)
AZ 05	Mohave, Yuma
CT 01	Fairfield
CT 02	New Haven
CT 03	Middlesex, New London, Windham
CT 04	Hartford, Tolland
CT 05	Litchfield
IL 06	Area is not defined. Chicago is included in IL 07.
IL 07	Cook, Du Page
MA 01	Berkshire, Franklin, Hampden, Hampshire
MA 02	Worcester
MA 03	Essex, Middlesex
MA 04	Norfolk, Suffolk
MA 05	Barnstable, Bristol, Dukes, Nantucket, Plymouth
MA 06	Area is not defined. All of Essex and Middlesex Counties are included in MA 03.
NM 01	All counties in New Mexico (includes NM 02)
UT 01	All counties in Utah (includes UT 02)

Infant, neonatal, and postneonatal mortality rates, corresponding ranks, and ratios of change by race: U.S. health service areas (HSA's), 1969-73 and 1974-77

HSA	R	-----INFANT-----					-----NEONATAL-----					-----POSTNEONATAL-----					BIRTHS	
		RATE		RANK		RATIO	RATE		RANK		RATIO	RATE		RANK		RATIO	1969	1974
		1969	1974	1969	1974	<u>74-77</u> 69-73	1969	1974	1969	1974	<u>74-77</u> 69-73	1969	1974	1969	1974	<u>74-77</u> 69-73	-73	-77
ALA 01 1		21.2	17.5	161.0	167.0	0.82	15.1	12.3	136.0	160.0	0.82	6.1	5.2	174.0	169.0	0.84	59260	41658
ALA 01 2		19.8	15.6	188.0	182.0	0.79	14.8	11.2	177.0	169.0	0.76	5.1	4.4	183.0	173.0	0.97	50414	35460
ALA 01 3		29.6	28.4	65.0	124.0	0.96	17.0	18.8	14.0	108.0	1.11	12.6	9.6	142.0	132.0	0.76	8647	6050
ALA 01 4		-	13.5	NA	NA	NA	-	6.8	NA	NA	NA	-	6.8	NA	NA	NA	199	148
ALA 02 1		25.7	17.1	197.0	157.0	0.67	17.5	12.7	194.0	169.0	0.73	8.2	4.3	197.0	112.0	0.53	18514	14059
ALA 02 2		16.9	12.4	85.0	31.0	0.73	13.5	10.2	112.0	106.0	0.75	3.4	2.2	29.0	2.0	0.54	10637	7837
ALA 02 3		37.6	23.1	148.0	48.0	0.62	22.9	16.0	104.0	55.0	0.70	14.7	7.1	151.0	57.0	0.49	7845	6180
ALA 02 4		-	-	NA	NA	NA	-	-	NA	NA	NA	-	-	NA	NA	NA	32	42
ALA 03 1		21.8	16.9	169.0	153.0	0.77	16.3	12.4	171.0	163.0	0.76	5.6	4.5	149.0	125.5	0.81	68639	53321
ALA 03 2		18.4	14.6	141.0	152.0	0.79	14.3	10.9	152.0	157.0	0.76	4.1	3.7	118.0	136.0	0.89	46237	35391
ALA 03 3		29.1	21.6	58.0	34.0	0.75	20.4	15.4	62.0	44.0	0.76	8.6	6.2	70.0	28.0	0.72	22282	17813
ALA 03 4		8.3	8.5	NA	NA	NA	8.3	8.5	NA	NA	NA	-	-	NA	NA	NA	120	117
ALA 04 1		24.6	21.3	194.0	199.0	0.87	16.7	15.2	182.0	199.0	0.91	7.9	6.2	195.0	193.0	0.78	41044	33064
ALA 04 2		19.4	17.6	181.0	199.0	0.91	14.4	13.1	163.0	197.0	0.91	5.0	4.5	179.0	177.0	0.90	29889	21903
ALA 04 3		40.6	31.5	156.0	147.0	0.78	24.1	20.8	124.0	136.0	0.86	16.5	10.8	156.0	149.0	0.55	10535	8059
ALA 04 4		-	-	NA	NA	NA	-	-	NA	NA	NA	-	-	NA	NA	NA	620	102
ALA 05 1		26.4	21.5	199.0	200.0	0.82	17.2	14.8	191.0	197.0	0.86	9.1	6.7	199.0	198.0	0.74	63065	45047
ALA 05 2		17.1	14.5	91.0	146.0	0.85	13.1	11.1	90.0	164.0	0.84	4.0	3.4	97.0	65.0	0.86	36571	25412
ALA 05 3		39.3	30.8	155.0	146.0	0.78	23.0	19.7	109.0	123.0	0.85	16.2	11.1	154.0	151.0	0.68	26294	19398
ALA 05 4		15.0	12.7	NA	NA	NA	5.0	12.7	NA	NA	NA	10.0	-	NA	NA	NA	200	237
ALA 06 1		24.1	19.8	191.0	193.0	0.82	17.4	13.0	193.0	176.0	0.75	6.8	6.7	188.0	199.0	1.00	64385	50234
ALA 06 2		17.5	13.7	108.5	99.0	0.78	13.7	9.1	122.0	41.0	0.66	3.9	4.6	69.0	185.0	1.20	35574	26806
ALA 06 3		32.3	26.9	101.0	105.0	0.83	22.0	17.6	93.0	82.0	0.80	10.3	9.2	112.0	125.0	0.89	28690	23311
ALA 06 4		24.8	-	NA	NA	NA	8.3	-	NA	NA	NA	16.5	-	NA	NA	NA	121	117
ALK C1 1		19.5	15.9	117.0	128.0	0.81	13.0	9.7	55.0	44.0	0.74	6.5	6.2	180.0	194.0	0.95	35240	30852
ALK 01 2		17.8	13.3	121.0	72.0	0.75	12.6	8.4	69.0	16.0	0.66	5.2	5.0	190.0	195.5	0.95	25743	22112
ALK 01 3		27.4	28.2	37.0	NA	NA	20.4	24.2	60.0	NA	NA	7.1	4.0	23.0	NA	NA	1130	993
ALK 01 4		23.5	21.6	55.0	65.0	0.92	13.1	11.5	59.0	63.0	0.87	10.4	10.1	52.0	54.0	0.97	8367	7747
ARI 01 1		16.8	14.6	35.0	87.0	0.87	11.8	10.3	21.0	70.0	0.87	5.0	4.4	122.0	114.0	0.88	106840	91329
ARI 01 2		15.9	14.2	47.0	131.0	0.89	11.5	11.0	21.0	93.0	0.87	4.4	4.2	150.0	150.0	0.94	96678	82423
ARI 01 3		30.8	23.3	80.0	45.0	0.75	21.7	18.8	83.0	107.0	0.87	9.1	4.2	88.0	3.0	0.46	5394	4517
ARI 01 4		18.2	14.4	48.0	53.0	0.79	7.3	6.6	32.0	42.0	0.90	10.9	7.7	53.0	57.0	0.71	4768	4389
ARI 02 1		17.3	12.3	55.0	7.0	0.69	12.4	8.2	34.0	7.0	0.66	4.9	3.8	117.0	61.0	0.77	45919	39905
ARI 02 2		16.7	11.4	72.0	5.0	0.68	12.5	8.0	66.0	7.0	0.64	4.2	3.4	125.0	58.0	0.81	41955	36326
ARI 02 3		22.7	14.1	6.0	3.0	0.62	15.1	7.1	9.0	1.0	0.47	7.6	7.1	33.0	52.0	0.93	1718	1557
ARI 02 4		24.5	20.3	56.0	62.0	0.83	7.6	11.4	33.0	62.0	1.50	16.9	8.9	62.0	62.0	0.53	2246	2022
ARI 03 1		24.9	19.6	195.0	192.0	0.79	12.9	9.7	53.0	45.0	0.75	12.0	10.0	202.0	202.0	0.93	23574	21282
ARI 03 2		19.5	13.3	182.0	73.0	0.69	13.8	9.1	132.0	43.0	0.66	5.6	4.2	197.0	155.0	0.75	9971	9218
ARI 03 3		28.8	20.6	NA	NA	NA	12.8	15.5	NA	NA	NA	16.0	5.2	NA	NA	NA	312	194
ARI 03 4		28.9	24.5	62.0	67.0	0.85	12.3	10.0	54.0	60.0	0.82	16.6	14.5	61.0	68.0	0.97	13291	11870

Infant, neonatal, and postneonatal mortality rates, corresponding ranks, and ratios of change by race: U.S. health service areas (HSA's), 1969-73 and 1974-77--Con.

HSA	R	-----INFANT-----					-----NEONATAL-----					-----POSTNEONATAL-----					BIRTHS	
		RATE		RANK		RATIO	RATE		RANK		RATIO	RATE		RANK		RATIO	1969	1974
		1969 -73	1974 -77	1969 -73	1974 -77	<u>74-77</u> 69-73	1969 -73	1974 -77	1969 -73	1974 -77	<u>74-77</u> 69-73	1969 -73	1974 -77	1969 -73	1974 -77	<u>74-77</u> 69-73	1969 -73	1974 -77
ARI	05 1	17.0	13.9	48.0	54.0	0.82	11.1	9.6	9.0	42.0	0.87	6.0	4.2	168.0	103.0	0.71	9407	8720
ARI	05 2	16.8	13.8	81.0	108.0	0.82	11.8	9.6	34.5	67.0	0.82	5.0	4.2	181.0	158.0	0.93	8547	7890
ARI	05 3	29.4	8.5	NA	NA	NA	-	4.2	NA	NA	NA	29.4	4.2	NA	NA	NA	204	236
ARI	05 4	15.2	16.8	NA	NA	NA	4.6	11.8	NA	NA	NA	10.7	5.1	NA	NA	NA	656	594
ARK	01 1	18.5	14.5	88.0	76.0	0.78	13.3	10.1	65.5	61.0	0.76	5.2	4.4	140.0	119.0	0.84	45719	37964
ARK	01 2	18.6	14.3	153.0	115.0	0.75	13.6	9.8	114.0	74.0	0.72	5.1	4.2	184.0	152.0	0.93	42949	35295
ARK	01 3	17.0	24.3	1.0	70.0	1.43	9.1	16.9	1.0	71.0	1.85	7.9	7.4	48.0	79.0	0.94	2524	2017
ARK	01 4	8.1	12.3	NA	NA	NA	8.1	6.1	NA	NA	NA	-	6.1	NA	NA	NA	246	652
ARK	02 1	20.9	17.1	152.0	156.0	0.81	14.8	11.7	128.0	139.0	0.79	6.1	5.4	173.0	175.0	0.97	47071	37828
ARK	02 2	17.5	14.0	107.0	119.0	0.80	13.4	10.6	101.0	136.0	0.79	4.2	3.4	126.0	70.0	0.82	33525	27282
ARK	02 3	29.4	25.2	62.0	84.0	0.86	18.4	14.8	26.0	33.0	0.81	11.1	10.5	130.0	146.0	0.94	13460	10424
ARK	02 4	23.3	-	NA	NA	NA	23.3	-	NA	NA	NA	-	-	NA	NA	NA	86	122
ARK	03 1	20.5	15.9	141.0	129.0	0.78	15.6	11.2	152.0	112.0	0.72	4.9	4.6	112.5	139.5	0.95	40069	32803
ARK	03 2	17.9	13.2	124.0	59.0	0.74	14.0	9.4	138.0	55.0	0.67	3.9	3.8	80.5	123.0	0.98	29675	23071
ARK	03 3	28.4	22.6	50.0	40.0	0.80	20.6	15.9	66.0	52.0	0.77	7.8	6.7	38.0	42.0	0.86	10262	9547
ARK	03 4	-	5.4	NA	NA	NA	-	5.4	NA	NA	NA	-	-	NA	NA	NA	132	185
ARK	04 1	20.6	19.2	145.0	187.0	0.93	14.0	12.9	95.0	171.0	0.92	6.5	6.3	181.0	195.0	0.96	39665	30309
ARK	04 2	15.9	15.2	48.0	172.0	0.95	12.5	11.3	65.0	177.0	0.91	3.5	3.8	34.5	124.0	1.11	22893	17557
ARK	04 3	27.0	24.8	31.0	80.0	0.92	16.2	15.1	12.0	38.0	0.93	10.8	9.6	123.0	133.0	0.89	16704	12687
ARK	04 4	-	15.4	NA	NA	NA	-	-	NA	NA	NA	-	15.4	NA	NA	NA	68	65
CAL	01 1	16.8	12.5	38.0	18.0	0.74	11.7	7.7	18.0	2.0	0.66	5.1	4.8	130.5	149.0	0.93	38590	32489
CAL	01 2	17.0	12.6	88.0	42.0	0.74	12.0	7.8	43.0	4.0	0.65	5.0	4.8	182.0	190.5	0.95	36358	30248
CAL	01 3	29.5	12.9	NA	NA	NA	21.1	10.3	NA	NA	NA	8.4	2.6	NA	NA	NA	474	387
CAL	01 4	9.1	10.2	22.0	39.0	1.13	3.4	4.9	7.0	20.0	1.42	5.7	5.4	41.0	51.0	0.95	1758	1854
CAL	02 1	15.4	12.9	18.0	32.0	0.84	11.3	8.4	12.0	13.0	0.75	4.2	4.5	58.0	127.0	1.18	75977	63058
CAL	02 2	15.1	12.8	20.0	46.0	0.85	11.0	8.3	9.0	14.0	0.75	4.1	4.5	114.0	178.0	1.19	57705	54937
CAL	02 3	23.6	18.8	9.0	12.0	0.80	17.8	12.1	21.0	12.0	0.68	5.8	6.7	11.0	45.0	1.16	5167	5044
CAL	02 4	9.0	5.8	20.0	15.0	0.65	6.4	4.5	24.0	17.0	0.71	2.6	1.3	20.0	13.0	0.50	3105	3077
CAL	03 1	17.0	12.0	46.0	9.0	0.70	12.7	8.1	46.0	6.0	0.64	4.3	3.8	69.0	67.0	0.89	38895	31495
CAL	03 2	16.7	11.9	73.0	17.0	0.71	12.6	8.1	72.0	9.0	0.64	4.1	3.8	104.0	121.0	0.94	34987	27549
CAL	03 3	27.8	19.4	42.0	14.0	0.70	19.5	12.6	41.0	17.0	0.65	8.3	6.8	58.0	47.0	0.82	2410	2215
CAL	03 4	6.7	3.5	8.0	2.0	0.52	3.3	2.9	5.0	6.0	0.87	3.3	0.6	28.0	2.0	0.17	1498	1731
CAL	04 1	14.9	12.3	8.0	10.0	0.80	10.3	8.4	3.0	12.0	0.81	4.6	3.6	88.0	43.5	0.79	101278	67375
CAL	04 2	14.4	11.5	6.0	10.0	0.80	10.4	8.1	5.0	10.0	0.78	4.0	3.4	93.0	67.0	0.86	73315	44366
CAL	04 3	23.7	17.8	10.0	9.0	0.75	14.0	12.2	4.0	13.0	0.87	9.7	5.6	100.0	15.0	0.58	14860	11717
CAL	04 4	8.1	7.7	15.0	29.0	0.95	5.9	5.4	20.0	29.0	0.92	2.2	2.3	16.0	26.0	1.14	13103	11292
CAL	05 1	16.7	12.4	32.0	17.0	0.74	12.4	8.3	35.0	9.0	0.67	4.3	4.2	72.0	93.0	0.96	123215	89368
CAL	05 2	15.1	11.5	19.0	8.0	0.76	11.2	8.0	14.0	6.0	0.71	3.9	3.5	87.0	76.0	0.90	95055	64737
CAL	05 3	26.4	18.2	22.0	11.0	0.69	19.5	13.8	42.0	6.0	0.55	6.9	7.4	21.0	75.0	1.07	22146	18475
CAL	05 4	6.8	5.2	9.0	10.0	0.76	5.3	3.7	18.0	11.0	0.70	1.5	1.5	10.0	14.0	0.98	6014	6156

Infant, neonatal, and postneonatal mortality rates, corresponding ranks, and ratios of change by race: U.S. health service areas (HSA's), 1969-73 and 1974-77—Con.

HSA	R	-----INFANT-----					-----NEONATAL-----					-----POSTNEONATAL-----					BIRTHS	
		RATE		RANK		RATIO	RATE		RANK		RATIO	RATE		RANK		RATIO	1969	1974
		1969 -73	1974 -77	1969 -73	1974 -77	<u>74-77</u> 69-73	1969 -73	1974 -77	1969 -73	1974 -77	<u>74-77</u> 69-73	1969 -73	1974 -77	1969 -73	1974 -77	<u>74-77</u> 69-73	-73	-77
CAL 06 1		16.4	12.0	26.0	11.0	0.74	11.6	7.6	15.0	1.0	0.66	4.8	4.4	105.0	118.0	0.92	55028	46630
CAL 06 2		16.0	12.0	52.0	20.0	0.75	11.5	7.8	22.0	3.0	0.68	4.5	4.2	157.0	151.0	0.92	50388	42481
CAL 06 3		26.5	20.2	23.0	19.0	0.76	15.7	9.9	10.0	5.0	0.63	10.8	10.3	126.0	145.0	0.96	2866	2420
CAL 06 4		9.0	1.7	21.0	1.0	0.19	7.3	0.6	30.0	1.0	0.08	1.7	1.2	12.0	12.0	0.68	1774	1729
CAL 07 1		14.3	11.6	4.0	2.0	0.81	10.1	8.0	2.0	5.0	0.79	4.1	3.6	57.0	39.0	0.86	89539	69028
CAL 07 2		14.3	11.9	5.0	16.0	0.83	10.2	8.2	3.0	13.0	0.81	4.1	3.6	111.0	102.0	0.89	82239	60664
CAL 07 3		24.5	14.1	13.0	4.0	0.58	18.5	9.5	27.0	4.0	0.51	6.1	4.6	13.0	8.0	0.76	2974	3678
CAL 07 4		7.9	5.5	13.0	12.0	0.71	4.2	3.8	12.0	12.0	0.92	3.7	1.7	34.0	18.0	0.46	4326	4686
CAL 08 1		16.1	12.4	21.0	15.0	0.77	11.9	8.5	24.0	16.0	0.72	4.2	3.9	61.0	72.0	0.92	42152	37341
CAL 08 2		16.0	12.3	49.0	30.0	0.77	11.9	8.5	42.0	19.0	0.71	4.0	3.9	101.0	132.0	0.96	38707	33589
CAL 08 3		27.0	23.3	30.0	51.0	0.86	18.6	17.2	29.0	74.0	0.92	8.3	6.1	60.0	27.0	0.73	1558	1806
CAL 08 4		9.0	3.6	19.0	5.0	0.40	5.3	2.1	17.0	3.0	0.39	3.7	1.5	35.0	15.0	0.42	1887	1946
CAL 09 1		17.7	14.6	66.0	83.0	0.82	12.6	10.2	41.0	65.0	0.81	5.1	4.4	132.0	116.5	0.86	96812	84670
CAL 09 2		17.2	14.3	96.0	137.0	0.83	12.5	9.9	62.0	86.0	0.80	4.8	4.3	171.0	168.0	0.91	88308	77291
CAL 09 3		29.2	24.1	60.0	67.0	0.82	17.5	16.6	16.0	65.5	0.95	11.7	7.5	133.0	81.0	0.64	5886	4688
CAL 09 4		8.4	7.4	16.0	27.0	0.88	6.5	6.3	25.0	39.0	0.97	1.9	1.1	15.0	11.0	0.58	2618	2691
CAL 10 1		16.0	11.4	20.0	1.0	0.71	12.2	7.8	30.0	3.0	0.64	3.8	3.6	29.0	47.0	0.95	54861	44460
CAL 10 2		16.2	11.3	57.0	4.0	0.70	12.4	7.8	60.0	2.0	0.63	3.8	3.6	65.0	87.0	0.93	51840	41313
CAL 10 3		19.3	20.7	3.0	22.0	1.07	12.4	13.2	2.0	21.0	1.06	6.8	7.5	20.0	84.0	1.10	1610	1596
CAL 10 4		4.3	5.2	3.0	9.0	1.21	3.5	3.2	9.0	9.0	0.91	0.7	1.9	2.0	22.0	2.73	1411	1551
CAL 11 1		17.1	13.6	51.0	47.0	0.80	12.4	9.3	36.0	32.0	0.75	4.7	4.3	94.0	106.0	0.92	588419	453835
CAL 11 2		15.7	12.3	41.0	29.0	0.78	11.6	8.4	23.0	18.0	0.73	4.1	3.9	122.0	128.0	0.93	477698	361052
CAL 11 3		26.7	22.6	26.0	41.0	0.85	18.6	15.3	30.0	41.0	0.82	8.1	7.4	51.0	76.0	0.91	85221	69102
CAL 11 4		10.6	7.2	31.0	26.0	0.68	7.3	5.2	31.0	25.0	0.71	3.3	2.0	26.0	24.0	0.61	25500	23681
CAL 12 1		17.8	13.3	69.0	39.0	0.75	13.0	8.6	59.0	17.0	0.66	4.7	4.7	100.0	145.5	1.00	100064	82276
CAL 12 2		17.3	13.2	98.0	60.0	0.76	12.8	8.5	83.0	22.0	0.66	4.5	4.7	152.0	188.0	1.06	91781	74372
CAL 12 3		28.2	17.5	47.0	8.0	0.62	19.2	11.5	35.5	8.0	0.60	9.0	6.0	83.0	24.0	0.67	6304	5641
CAL 12 4		7.1	7.1	11.0	23.0	1.00	3.5	5.3	8.0	28.0	1.50	3.5	1.8	31.0	20.0	0.50	1979	2263
CAL 13 1		15.1	11.8	10.0	6.0	0.78	11.7	8.4	19.0	14.0	0.72	3.4	3.4	9.0	25.0	1.00	122858	102014
CAL 13 2		15.2	12.2	27.0	25.0	0.80	11.8	8.6	33.0	24.0	0.73	3.4	3.5	30.0	79.0	1.03	118156	95655
CAL 13 3		27.3	10.2	35.0	1.0	0.37	20.1	7.8	54.0	2.0	0.39	7.1	2.4	26.0	1.0	0.34	1540	2055
CAL 13 4		6.0	5.3	6.0	11.0	0.89	5.1	4.4	15.0	15.0	0.87	0.9	0.9	7.0	10.0	0.98	3162	4304
CAL 14 1		16.9	12.1	44.0	12.0	0.72	12.0	8.4	25.0	11.0	0.70	4.9	3.8	120.0	55.0	0.76	123013	105277
CAL 14 2		16.6	11.7	68.0	13.0	0.71	11.8	8.2	37.0	12.0	0.69	4.8	3.6	172.0	89.0	0.75	119049	90070
CAL 14 3		26.1	21.4	19.0	29.0	0.82	17.5	14.2	17.0	28.0	0.81	8.6	7.2	69.0	72.5	0.84	7942	7891
CAL 14 4		10.8	6.8	33.0	22.0	0.63	7.6	4.5	34.5	16.0	0.59	3.2	2.3	25.0	27.0	0.74	6022	7316
COL 01 1		17.0	12.7	47.0	26.0	0.75	12.5	8.7	38.0	18.0	0.69	4.5	4.1	84.0	84.0	0.91	131000	106504
COL 01 2		16.8	12.4	77.0	34.0	0.74	12.4	8.5	59.0	20.0	0.68	4.4	4.0	147.0	141.0	0.90	122863	98975
COL 01 3		23.5	19.6	8.0	17.0	0.84	17.4	14.2	15.0	27.0	0.81	6.0	5.4	12.0	14.0	0.90	6139	5359
COL 01 4		10.0	9.7	29.0	38.0	0.97	6.5	5.1	26.0	24.0	0.78	3.5	4.6	30.0	43.0	1.32	1998	2170

Infant, neonatal, and postneonatal mortality rates, corresponding ranks, and ratios of change by race: U.S. health service areas (HSA's), 1969-73 and 1974-77-Con.

HSA	R	-----INFANT-----					-----NEONATAL-----					-----POSTNEONATAL-----					BIRTHS	
		RATE		RANK		RATIO	RATE		RANK		RATIO	RATE		RANK		RATIO	1969	1974
		1969	1974	1969	1974	<u>74-77</u> 69-73	1969	1974	1969	1974	<u>74-77</u> 69-73	1969	1974	1969	1974	<u>74-77</u> 69-73	-73	-77
COL 02 1		21.6	15.8	166.0	125.0	0.73	16.1	10.3	167.0	71.0	0.64	5.5	5.5	147.0	180.5	1.01	51187	41900
COL 02 2		21.4	15.8	198.0	186.0	0.74	16.1	10.3	197.0	110.5	0.64	5.3	5.6	192.0	201.0	1.05	48469	39022
COL 02 3		29.6	21.3	64.0	28.0	0.72	19.0	14.7	33.0	32.0	0.77	10.5	6.5	116.0	35.5	0.62	1995	1833
COL 02 4		13.8	6.7	NA	21.0	NA	9.7	4.8	NA	19.0	NA	4.1	1.9	NA	21.0	NA	723	1045
COL 03 1		20.5	14.4	143.0	71.0	0.70	16.1	13.3	166.0	67.0	0.64	4.4	4.2	76.0	94.0	0.95	16175	14921
COL 03 2		19.9	14.5	189.0	149.0	0.73	16.0	10.4	195.0	122.0	0.65	3.9	4.1	89.0	152.0	1.06	15601	14515
COL 03 3		20.0	30.3	NA	NA	NA	20.0	-	NA	NA	NA	-	30.3	NA	NA	NA	50	33
COL 03 4		40.1	8.0	NA	NA	NA	21.0	5.4	NA	NA	NA	19.1	2.7	NA	NA	NA	524	373
CON 01 1		17.1	14.1	52.0	60.0	0.83	13.1	11.7	61.0	136.0	0.89	4.0	2.5	49.0	1.0	0.62	54306	36085
CON 01 2		15.3	12.0	32.0	22.0	0.78	11.8	9.9	36.0	85.0	0.84	3.5	2.1	42.0	1.0	0.60	46446	31434
CON 01 3		28.4	27.4	53.0	115.0	0.96	21.3	22.6	81.0	147.0	1.06	7.1	4.8	25.0	10.0	0.67	7455	5218
CON 01 4		9.9	2.3	NA	NA	NA	7.4	2.3	NA	NA	NA	2.5	-	NA	NA	NA	405	433
CON 02 1		16.9	15.0	41.0	102.0	0.89	13.3	11.8	68.0	142.0	0.88	3.6	3.2	11.0	16.0	0.91	54741	35762
CON 02 2		14.9	13.1	14.0	58.0	0.88	12.0	13.3	46.0	113.0	0.86	2.9	2.8	2.0	20.0	0.98	46716	30296
CON 02 3		29.6	26.5	63.0	103.0	0.90	21.9	20.8	90.0	135.0	0.95	7.7	5.8	36.0	20.0	0.75	7541	5200
CON 02 4		10.3	3.8	NA	NA	NA	6.2	3.8	NA	NA	NA	4.1	-	NA	NA	NA	484	266
CON 03 1		17.0	14.2	49.0	64.0	0.83	13.1	13.4	62.0	73.0	0.79	3.9	3.8	38.0	66.0	0.98	35371	23953
CON 03 2		17.0	13.9	89.0	110.0	0.81	13.0	10.2	85.0	108.0	0.79	4.0	3.7	99.0	103.0	0.91	33523	22422
CON 03 3		20.4	24.0	4.0	65.0	1.18	18.3	15.7	25.0	48.0	0.86	2.1	8.3	1.0	107.0	3.92	1424	1210
CON 03 4		4.7	-	NA	NA	NA	4.7	-	NA	NA	NA	-	-	NA	NA	NA	424	321
CON 04 1		16.7	14.8	34.0	94.0	0.88	13.1	11.6	60.0	133.0	0.89	3.7	3.2	21.0	14.0	0.87	68396	42736
CON 04 2		14.9	12.8	16.0	49.0	0.86	12.0	10.1	48.0	101.0	0.84	2.9	2.7	3.0	10.0	0.94	61057	37223
CON 04 3		33.8	29.3	122.5	135.0	0.87	23.0	22.4	107.0	146.0	0.97	10.8	6.9	122.0	55.0	0.64	6873	5048
CON 04 4		4.3	12.9	NA	NA	NA	4.3	10.8	NA	NA	NA	-	2.2	NA	NA	NA	466	465
CON 05 1		11.6	17.3	1.0	155.0	1.46	8.7	13.8	1.0	189.0	1.58	2.9	3.3	1.0	20.0	1.12	9876	6396
CON 05 2		11.6	17.2	1.0	196.0	1.48	8.6	14.0	1.0	201.0	1.62	3.0	3.2	8.0	35.0	1.37	9718	6287
CON 05 3		17.9	-	NA	NA	NA	17.9	-	NA	NA	NA	-	-	NA	NA	NA	112	64
CON 05 4		-	22.2	NA	NA	NA	-	-	NA	NA	NA	-	22.2	NA	NA	NA	46	45
DEL 01 1		18.6	14.4	93.0	73.0	0.77	14.5	10.6	117.0	86.0	0.73	4.1	3.9	56.0	69.0	0.93	47561	33235
DEL 01 2		14.9	12.5	15.0	38.0	0.84	11.9	9.3	41.0	50.0	0.78	3.0	3.2	6.0	38.0	1.08	37383	25617
DEL 01 3		33.3	21.6	118.0	32.0	0.65	24.5	15.2	131.0	40.0	0.62	8.8	6.3	78.0	30.0	0.72	9750	7285
DEL 01 4		11.7	9.0	NA	NA	NA	11.7	9.0	NA	NA	NA	-	-	NA	NA	NA	428	333
D C 02 1		28.1	27.1	202.0	202.0	0.96	21.5	21.2	202.0	202.0	0.99	6.7	5.9	187.0	187.0	0.88	67001	39537
D C 02 2		22.7	16.6	199.0	193.0	0.73	19.0	13.8	202.0	199.0	0.73	3.7	2.8	48.0	17.0	0.77	9037	5719
D C 02 3		29.3	29.1	61.0	134.0	1.00	22.0	22.7	94.0	148.0	1.03	7.2	6.4	30.0	33.0	0.89	57116	33382
D C 02 4		11.8	6.9	NA	NA	NA	10.6	4.6	NA	NA	NA	1.2	2.3	NA	NA	NA	848	436
FLA 01 1		21.7	17.4	167.0	164.0	0.80	15.9	12.1	161.0	153.0	0.76	5.8	5.3	161.0	173.0	0.92	58515	52259
FLA 01 2		18.6	13.8	152.0	103.0	0.74	14.4	10.3	158.0	112.0	0.71	4.3	3.5	138.0	77.0	0.82	50364	37423
FLA 01 3		31.3	28.1	84.0	118.0	0.90	20.8	17.5	72.0	80.0	0.84	10.5	10.5	115.0	147.0	1.30	17156	13752
FLA 01 4		9.0	6.5	NA	19.0	NA	9.0	5.5	NA	30.0	NA	-	0.9	NA	9.0	NA	995	1084

Infant, neonatal, and postneonatal mortality rates, corresponding ranks, and ratios of change by race: U.S. health service areas (HSA's), 1969-73 and 1974-77—Con.

HSA	R	-----INFANT-----					-----NEONATAL-----					-----POSTNEONATAL-----					BIRTHS	
		RATE		RANK		RATIO	RATE		RANK		RATIO	RATE		RANK		RATIO	1969	1974
		1969 -73	1974 -77	1969 -73	1974 -77	74-77 69-73	1969 -73	1974 -77	1969 -73	1974 -77	74-77 69-73	1969 -73	1974 -77	1969 -73	1974 -77	74-77 69-73	-73	-77
FLA 02 1		20.4	17.2	139.0	162.0	0.84	14.5	11.4	114.0	125.0	0.79	6.0	5.8	169.0	186.0	0.98	38037	31724
FLA 02 2		15.7	14.1	39.0	127.0	0.90	11.6	9.7	27.0	73.0	0.84	4.1	4.3	107.0	169.0	1.36	26964	22668
FLA 02 3		32.4	25.4	105.0	89.0	0.78	21.7	15.8	84.0	49.0	0.73	10.7	9.7	121.0	135.0	0.90	10913	8881
FLA 02 4		-	11.4	NA	NA	NA	-	5.7	NA	NA	NA	-	5.7	NA	NA	NA	160	175
FLA 03 1		21.1	16.5	156.0	148.0	0.79	15.9	11.7	162.0	141.0	0.74	5.2	4.9	136.0	154.5	0.94	71895	55014
FLA 03 2		18.5	13.3	147.0	65.0	0.72	14.3	9.5	154.0	60.0	0.66	4.2	3.7	133.0	111.0	0.89	51615	39236
FLA 03 3		28.3	25.8	49.0	95.0	0.91	20.5	17.8	65.0	87.0	0.87	7.8	8.0	43.0	130.0	1.32	19668	15101
FLA 03 4		3.3	4.4	NA	NA	NA	3.3	4.4	NA	NA	NA	-	-	NA	NA	NA	612	677
FLA 04 1		20.4	16.4	138.0	147.0	0.80	14.8	11.7	129.0	140.0	0.79	5.6	4.7	150.0	147.0	0.85	85760	66730
FLA 04 2		17.8	13.6	120.0	88.0	0.76	13.2	9.7	93.0	72.0	0.74	4.7	3.9	162.0	129.0	0.83	68359	53051
FLA 04 3		31.2	28.1	82.0	119.0	0.90	21.8	19.6	86.0	121.0	0.90	9.5	8.4	96.0	112.5	0.89	17009	13142
FLA 04 4		5.1	11.2	NA	NA	NA	5.1	11.2	NA	NA	NA	-	-	NA	NA	NA	392	537
FLA 05 1		18.9	14.1	102.5	62.0	0.75	14.3	9.7	107.0	47.0	0.68	4.6	4.4	91.0	122.0	0.96	59884	43845
FLA 05 2		15.8	12.1	44.0	24.0	0.77	12.3	8.7	56.0	25.0	0.70	3.5	3.5	40.0	74.0	0.99	47508	33731
FLA 05 3		31.6	21.7	88.0	35.0	0.69	22.6	13.8	101.0	25.0	0.61	9.0	8.0	84.0	97.0	0.88	12047	9666
FLA 05 4		6.1	2.2	NA	NA	NA	3.0	2.2	NA	NA	NA	3.0	-	NA	NA	NA	329	448
FLA 06 1		22.3	18.5	178.0	180.0	0.83	16.5	13.0	178.0	174.0	0.79	5.8	5.5	163.0	180.5	0.96	48684	40820
FLA 06 2		19.3	14.8	176.0	161.0	0.77	14.5	13.5	168.0	134.0	0.73	4.8	4.3	170.0	171.0	0.91	37792	31851
FLA 06 3		33.2	32.0	116.0	148.0	0.96	23.7	21.9	117.0	144.0	0.92	9.5	10.1	99.0	143.0	1.06	10618	8707
FLA 06 4		18.2	15.3	NA	NA	NA	18.2	15.3	NA	NA	NA	-	-	NA	NA	NA	274	262
FLA 07 1		23.5	17.8	186.0	172.0	0.76	16.8	13.0	186.0	172.0	0.77	6.7	4.8	186.0	153.0	0.73	39296	31402
FLA 07 2		18.0	13.0	132.0	55.0	0.72	13.5	10.4	113.0	119.0	0.77	4.5	2.6	151.0	6.0	0.59	26949	21406
FLA 07 3		35.9	28.6	141.0	129.0	0.80	24.3	18.8	125.0	109.0	0.78	11.6	9.8	131.0	139.0	0.84	12200	9817
FLA 07 4		6.8	-	NA	NA	NA	6.8	-	NA	NA	NA	-	-	NA	NA	NA	147	179
FLA 08 1		20.5	15.9	142.0	127.0	0.77	15.8	11.6	155.0	134.0	0.74	4.7	4.2	101.0	102.0	0.89	45786	35548
FLA 08 2		16.2	12.0	54.5	19.0	0.74	13.3	9.2	98.0	46.0	0.69	2.9	2.8	5.0	18.0	0.96	33799	26796
FLA 08 3		33.2	27.1	115.0	109.0	0.82	23.1	18.7	110.0	103.0	0.81	10.1	8.3	108.0	110.0	0.92	11695	9500
FLA 08 4		10.3	7.9	NA	NA	NA	10.3	4.0	NA	NA	NA	-	4.0	NA	NA	NA	292	252
FLA 09 1		18.1	14.9	78.0	98.0	0.83	13.7	11.0	84.0	107.0	0.80	4.4	3.9	78.0	79.0	0.89	98989	73317
FLA 09 2		14.5	11.5	10.0	9.0	0.79	11.4	8.9	19.0	34.0	0.78	3.1	2.6	13.5	7.0	0.84	71432	49980
FLA 09 3		27.6	23.0	41.0	44.0	0.83	19.8	16.0	47.0	56.0	0.81	7.8	7.0	39.0	58.0	0.89	26932	22561
FLA 09 4		9.6	-	NA	NA	NA	8.0	-	NA	NA	NA	1.6	-	NA	NA	NA	625	776
GA 02 1		20.2	16.0	136.0	136.0	0.79	14.6	10.9	123.0	98.5	0.74	5.6	5.2	151.0	170.0	0.92	44277	31904
GA 02 2		19.5	15.6	183.0	183.0	0.80	14.7	10.8	173.0	152.0	0.73	4.8	4.8	174.0	194.0	1.31	39196	29324
GA 02 3		26.2	19.4	20.0	13.0	0.74	13.9	11.7	3.0	10.0	0.84	12.3	7.7	137.0	87.0	0.63	4969	3511
GA 02 4		8.9	14.5	NA	NA	NA	8.9	-	NA	NA	NA	-	14.5	NA	NA	NA	112	69
GA 03 1		19.0	16.1	105.0	137.0	0.85	13.9	11.5	88.0	128.0	0.83	5.1	4.6	133.0	136.0	0.90	190817	129334
GA 03 2		15.2	12.0	29.0	21.0	0.79	11.6	8.5	25.0	21.0	0.73	3.7	3.5	49.5	90.0	0.96	127752	86444
GA 03 3		28.3	25.0	48.0	83.0	0.88	19.5	18.1	43.0	90.0	0.92	8.7	6.9	74.0	57.0	0.79	52381	41892
GA 03 4		1.5	4.0	NA	NA	NA	1.5	2.0	NA	NA	NA	-	2.0	NA	NA	NA	684	998

Infant, neonatal, and postneonatal mortality rates, corresponding ranks, and ratios of change by race: U.S. health service areas (HSA's), 1969-73 and 1974-77—Con.

HSA	R	-----INFANT-----					-----NEONATAL-----					-----POSTNEONATAL-----					BIRTHS	
		RATE		RANK		RATIO	RATE		RANK		RATIO	RATE		RANK		RATIO	1969	1974
		1969 -73	1974 -77	1969 -73	1974 -77	74-77 69-73	1969 -73	1974 -77	1969 -73	1974 -77	74-77 69-73	1969 -73	1974 -77	1969 -73	1974 -77	74-77 69-73	-73	-77
GA	06 1	23.1	18.6	184.0	184.0	0.81	13.5	11.4	78.0	126.0	0.85	9.6	7.2	200.0	200.0	0.75	53611	39401
GA	06 2	15.3	13.7	33.0	97.0	0.89	11.4	10.4	18.0	124.0	0.92	4.0	3.2	95.0	43.0	0.81	28606	20019
GA	06 3	32.2	23.9	97.0	62.0	0.74	16.0	12.5	11.0	16.0	0.78	16.1	11.3	153.0	152.5	0.70	24819	19242
GA	06 4	5.4	-	NA	NA	NA	5.4	-	NA	NA	NA	-	-	NA	NA	NA	186	140
GA	07 1	23.5	17.4	187.0	166.0	0.74	16.9	11.5	187.0	127.0	0.68	6.7	6.0	185.0	190.0	0.90	52291	38589
GA	07 2	18.9	15.2	162.0	173.0	0.80	15.0	11.1	179.0	166.0	0.74	3.9	4.0	82.0	146.0	1.34	33538	23733
GA	07 3	32.2	21.6	98.0	33.0	0.67	20.4	12.3	61.0	15.0	0.60	11.8	9.3	134.0	126.0	0.79	18493	14465
GA	07 4	3.8	-	NA	NA	NA	3.8	-	NA	NA	NA	-	-	NA	NA	NA	260	391
HAW	03 1	16.8	12.6	39.0	24.0	0.75	13.3	9.1	71.0	26.0	0.68	3.5	3.5	10.0	32.5	1.31	78678	64510
HAW	03 2	17.1	12.8	92.0	47.0	0.75	14.0	8.9	137.0	35.0	0.64	3.2	3.9	15.0	135.0	1.24	22817	17190
HAW	03 3	17.1	13.6	2.0	2.0	0.80	14.4	9.3	6.0	3.0	0.65	2.7	4.3	2.0	4.0	1.59	1112	1396
HAW	03 4	16.7	12.5	45.0	46.0	0.75	13.1	9.2	58.0	56.0	0.71	3.6	3.3	33.0	35.0	0.92	54749	45924
IDA	01 1	17.3	13.1	58.0	37.0	0.76	12.6	8.8	42.0	22.0	0.69	4.7	4.4	99.0	115.0	0.92	71167	68082
IDA	01 2	17.1	13.1	90.0	56.0	0.77	12.5	8.8	67.0	28.0	0.70	4.6	4.3	159.0	170.0	0.95	69392	66519
IDA	01 3	22.5	13.2	NA	NA	NA	22.5	8.8	NA	NA	NA	-	4.4	NA	NA	NA	222	228
IDA	01 4	28.3	14.2	60.0	52.0	0.50	15.5	8.2	63.0	49.0	0.53	12.9	6.0	56.0	55.0	0.47	1553	1335
ILL	01 1	18.9	14.7	99.0	90.0	0.78	14.2	10.6	100.0	84.0	0.75	4.7	4.1	98.0	91.0	0.87	50060	33984
ILL	01 2	17.8	14.0	123.0	123.0	0.79	13.6	10.2	117.0	103.0	0.75	4.3	3.9	137.0	127.0	0.91	46575	31401
ILL	01 3	35.1	24.5	136.0	76.0	0.70	23.4	16.5	113.0	61.0	0.70	11.7	8.0	132.0	191.0	0.69	3244	2367
ILL	01 4	-	-	NA	NA	NA	-	-	NA	NA	NA	-	-	NA	NA	NA	241	216
ILL	02 1	19.9	14.6	125.0	82.0	0.73	15.6	10.7	151.0	92.0	0.69	4.3	3.9	68.0	75.0	0.91	54992	42569
ILL	02 2	19.2	13.8	171.0	104.0	0.72	15.2	10.2	185.0	105.0	0.67	4.0	3.6	94.0	90.0	0.90	51757	39776
ILL	02 3	33.0	28.5	111.0	126.0	0.87	23.0	19.1	106.0	117.0	0.83	10.0	9.4	106.0	127.0	0.94	3004	2559
ILL	02 4	-	-	NA	NA	NA	-	-	NA	NA	NA	-	-	NA	NA	NA	231	234
ILL	03 1	18.8	14.3	96.0	70.0	0.76	14.6	10.9	124.0	97.0	0.74	4.1	3.4	55.0	28.0	0.83	41921	33113
ILL	03 2	18.3	13.5	139.0	82.0	0.74	14.3	10.2	151.0	107.0	0.72	4.0	3.3	100.0	44.0	0.81	40221	31542
ILL	03 3	32.8	34.0	108.0	155.0	1.04	25.6	26.0	145.0	155.0	1.02	7.2	8.0	28.0	96.0	1.10	1523	1383
ILL	03 4	-	10.6	NA	NA	NA	-	10.6	NA	NA	NA	-	-	NA	NA	NA	177	188
ILL	04 1	20.2	15.1	133.0	103.0	0.75	15.1	11.0	138.0	104.0	0.73	5.0	4.1	126.0	88.0	0.81	61066	45658
ILL	04 2	19.6	14.1	184.0	126.0	0.72	14.7	10.3	174.0	116.0	0.70	4.8	3.8	176.0	113.0	0.78	56284	42360
ILL	04 3	28.4	26.9	52.0	106.0	0.95	19.9	19.0	48.0	113.0	0.95	8.6	8.0	67.0	95.0	0.93	4326	3899
ILL	04 4	15.4	5.0	NA	NA	NA	15.4	2.5	NA	NA	NA	-	2.5	NA	NA	NA	456	399
ILL	05 1	17.8	15.7	70.0	118.0	0.88	14.0	11.8	94.0	143.0	0.84	3.8	3.9	24.0	74.0	1.04	42587	33595
ILL	05 2	16.9	15.4	82.0	176.0	0.91	13.6	11.6	116.0	184.0	0.86	3.3	3.7	24.0	110.0	1.13	40428	31722
ILL	05 3	38.4	22.8	152.0	42.0	0.60	24.7	15.0	134.0	35.0	0.61	13.6	7.8	149.0	91.0	0.57	1980	1663
ILL	05 4	-	9.5	NA	NA	NA	-	9.5	NA	NA	NA	-	-	NA	NA	NA	179	210
ILL	07 1	22.4	19.5	179.0	190.0	0.87	16.7	13.9	183.0	190.0	0.83	5.7	5.6	155.0	184.0	0.97	52224	364737
ILL	07 2	17.3	14.5	100.5	143.0	0.83	13.5	10.9	110.0	153.0	0.80	3.8	3.6	66.0	97.0	0.94	352679	243153
ILL	07 3	34.5	30.7	131.0	145.0	0.89	24.4	20.9	127.0	137.0	0.86	10.1	9.8	110.0	140.0	0.97	160038	115586
ILL	07 4	8.0	8.2	14.0	33.0	1.03	6.1	5.8	21.0	36.0	0.95	1.9	2.4	14.0	29.0	1.29	9507	8998

Infant, neonatal, and postneonatal mortality rates, corresponding ranks, and ratios of change by race: U.S. health service areas (HSA's), 1969-73 and 1974-77—Con.

HSA	R	-----INFANT-----					-----NEONATAL-----					-----POSTNEONATAL-----					BIRTHS	
		RATE		RANK		RATIO	RATE		RANK		RATIO	RATE		RANK		RATIO	1969	1974
		1969 -73	1974 -77	1969 -73	1974 -77	$\frac{74-77}{69-73}$	1969 -73	1974 -77	1969 -73	1974 -77	$\frac{74-77}{69-73}$	1969 -73	1974 -77	1969 -73	1974 -77	$\frac{74-77}{69-73}$	-73	-77
ILL	08 1	17.8	14.3	71.0	68.0	0.80	13.5	10.7	79.0	91.0	0.79	4.3	3.6	67.0	41.0	0.84	65451	50651
ILL	08 2	17.2	13.7	95.0	98.0	0.80	13.1	10.3	89.0	117.0	0.79	4.1	3.4	120.0	59.0	0.82	60637	46232
ILL	08 3	27.5	23.4	38.0	53.0	0.85	20.7	15.6	71.0	63.0	0.80	6.8	6.8	19.0	49.0	1.10	4106	3800
ILL	08 4	12.7	1.6	NA	NA	NA	11.3	1.6	NA	NA	NA	1.4	-	NA	NA	NA	708	619
ILL	09 1	21.0	16.9	153.0	154.0	0.81	16.5	13.1	177.0	177.0	0.79	4.5	3.9	85.0	71.0	0.86	36627	33874
ILL	09 2	19.2	14.7	172.0	157.0	0.77	15.5	11.4	189.0	179.0	0.74	3.8	3.3	61.0	48.0	0.88	32161	26794
ILL	09 3	35.5	32.0	138.0	149.0	0.90	25.4	24.2	142.0	152.0	0.95	10.1	7.9	109.0	92.0	0.78	4258	3807
ILL	09 4	-	18.3	NA	NA	NA	-	18.3	NA	NA	NA	-	-	NA	NA	NA	208	273
IND	01 1	20.2	16.3	134.0	141.0	0.81	15.4	11.8	144.0	147.0	0.77	4.8	4.5	111.0	124.0	0.92	171160	127624
IND	01 2	18.3	14.8	140.0	158.0	0.81	14.1	10.7	146.0	149.0	0.76	4.2	4.0	129.0	147.5	0.96	148818	109235
IND	01 3	33.5	25.8	120.0	93.0	0.77	24.1	18.7	122.0	102.0	0.78	9.4	7.1	94.0	64.0	0.75	21743	17779
IND	01 4	3.3	9.8	NA	NA	NA	1.7	8.2	NA	NA	NA	1.7	1.6	NA	NA	NA	599	610
IND	02 1	18.9	14.2	104.0	66.0	0.75	14.4	9.8	111.0	53.0	0.68	4.5	4.4	86.0	120.0	0.98	137510	129445
IND	02 2	17.8	13.2	122.0	64.0	0.74	13.8	9.1	127.0	40.0	0.66	4.1	4.1	108.0	151.0	1.01	166761	113724
IND	02 3	28.6	22.5	57.0	38.0	0.78	20.7	15.8	68.0	51.0	0.77	8.0	6.6	50.0	38.0	0.83	19938	14961
IND	02 4	8.6	1.3	NA	NA	NA	4.9	-	NA	NA	NA	3.7	1.3	NA	NA	NA	811	760
IND	03 1	17.8	14.1	72.0	59.0	0.79	13.9	10.3	91.0	69.0	0.74	3.9	3.9	37.0	69.0	0.99	101593	74529
IND	03 2	17.6	13.8	112.0	106.0	0.78	13.7	10.0	126.0	97.0	0.73	3.9	3.8	80.5	112.0	0.97	98583	71942
IND	03 3	26.7	25.9	25.0	96.0	0.97	21.5	19.8	82.0	104.0	0.87	5.2	7.2	6.0	69.0	1.38	2699	2236
IND	03 4	6.4	2.8	NA	NA	NA	6.4	-	NA	NA	NA	-	2.8	NA	NA	NA	311	351
KAN	01 1	17.5	15.0	62.0	99.5	0.86	13.5	12.1	80.0	155.0	0.90	3.9	2.8	39.0	4.0	0.73	29963	26048
KAN	01 2	17.3	14.8	99.0	159.0	0.86	13.4	12.0	104.0	190.0	0.90	3.9	2.8	85.0	19.0	0.73	29325	25482
KAN	01 3	35.0	30.2	NA	NA	NA	28.4	24.7	NA	NA	NA	6.6	5.5	NA	NA	NA	457	364
KAN	01 4	-	4.9	NA	NA	NA	-	4.9	NA	NA	NA	-	-	NA	NA	NA	181	202
KAN	02 1	15.4	13.7	16.0	49.5	0.89	11.7	10.0	20.0	56.0	0.85	3.6	3.7	18.0	49.5	1.10	47242	36080
KAN	02 2	14.9	13.3	13.0	69.0	0.89	11.7	10.0	28.0	88.5	0.85	3.2	3.3	16.0	55.0	1.06	43350	32340
KAN	02 3	25.1	19.5	14.0	15.0	0.78	14.5	12.7	7.0	18.0	0.88	10.6	6.8	118.0	46.0	0.64	2829	2517
KAN	02 4	11.3	11.4	35.0	42.0	1.01	6.6	5.7	27.0	35.0	0.87	4.7	5.7	39.0	53.0	1.22	1063	1223
KAN	03 1	20.3	14.8	137.0	93.0	0.73	16.5	11.0	179.0	106.0	0.66	3.8	3.8	25.0	58.0	1.00	61123	48963
KAN	03 2	19.3	14.1	178.0	128.0	0.73	15.7	10.5	192.5	135.0	0.67	3.7	3.6	51.0	96.0	0.99	56038	44613
KAN	03 3	34.5	25.4	132.0	86.0	0.74	29.2	19.0	156.0	114.0	0.65	5.4	6.3	8.0	32.0	1.18	4459	3466
KAN	03 4	6.4	4.5	NA	NA	NA	4.8	2.3	NA	NA	NA	1.6	2.3	NA	NA	NA	626	884
KY	01 1	18.2	15.0	81.0	101.0	0.82	13.6	10.7	82.0	89.5	0.78	4.6	4.3	90.0	111.0	0.94	146808	110594
KY	01 2	16.9	13.9	84.0	112.0	0.82	12.8	10.0	81.0	95.0	0.78	4.1	3.9	113.0	137.0	0.95	126660	95104
KY	01 3	27.2	22.6	34.0	39.0	0.83	19.3	15.3	39.0	42.0	0.79	7.9	7.2	47.0	72.5	0.91	19495	14676
KY	01 4	1.5	3.7	NA	NA	NA	1.5	2.5	NA	NA	NA	-	1.2	NA	NA	NA	653	814
KY	02 1	20.1	16.1	131.0	140.0	0.80	14.3	11.4	105.0	121.5	0.79	5.8	4.7	165.0	144.0	0.81	118252	94594
KY	02 2	20.1	15.9	190.0	188.0	0.79	14.4	11.3	157.0	175.0	0.79	5.8	4.6	199.0	184.0	0.80	112671	90171
KY	02 3	20.9	20.9	5.0	24.0	1.00	14.0	14.2	5.0	29.0	1.01	6.9	6.7	22.0	44.0	0.97	5353	4155
KY	02 4	4.4	7.5	NA	NA	NA	4.4	3.7	NA	NA	NA	-	3.7	NA	NA	NA	228	268

Infant, neonatal, and postneonatal mortality rates, corresponding ranks, and ratios of change by race: U.S. health service areas (HSA's), 1969-73 and 1974-77—Con.

HSA	R	-----INFANT-----					-----NEONATAL-----					-----POSTNEONATAL-----					BIRTHS		
		RATE		RANK		RATIO	RATE		RANK		RATIO	RATE		RANK		RATIO	1969	1974	
		1969 -73	1974 -77	1969 -73	1974 -77	<u>74-77</u> 69-73	1969 -73	1974 -77	1969 -73	1974 -77	<u>74-77</u> 69-73	1969 -73	1974 -77	1969 -73	1974 -77	<u>74-77</u> 69-73	-73	-77	
LA	01	1	22.6	17.9	181.0	175.0	0.79	17.3	13.6	192.0	187.0	0.79	5.3	4.3	142.0	139.0	0.91	128407	133167
LA	01	2	18.9	13.5	165.0	84.0	0.71	15.2	10.1	184.0	99.0	0.66	3.7	3.4	58.0	62.0	0.91	78396	57699
LA	01	3	28.5	24.4	54.0	74.0	0.85	20.7	18.7	69.0	100.0	0.90	7.9	5.7	45.0	16.0	0.72	49271	41343
LA	01	4	14.9	7.1	NA	24.0	NA	12.2	5.2	NA	38.0	NA	2.7	0.9	NA	8.0	NA	740	1125
LA	02	1	22.1	17.7	176.0	171.0	0.80	16.4	13.3	175.0	181.0	0.81	5.8	4.4	164.0	123.0	0.77	127721	100335
LA	02	2	17.7	13.3	116.0	66.5	0.75	13.8	10.5	130.0	133.0	0.76	3.9	2.8	88.0	15.0	0.71	83196	64685
LA	02	3	30.6	26.1	77.0	100.0	0.85	21.3	18.6	79.0	98.0	0.87	9.3	7.6	92.0	85.0	0.81	44214	35210
LA	02	4	6.4	2.3	NA	NA	NA	6.4	2.3	NA	NA	NA	-	-	NA	NA	NA	311	440
LA	03	1	24.0	19.2	190.0	188.0	0.80	17.7	13.5	197.0	184.0	0.77	6.3	5.6	175.0	185.0	0.89	131006	78021
LA	03	2	18.6	14.3	149.0	139.0	0.77	14.8	10.4	178.0	118.0	0.70	3.8	4.0	62.0	140.0	1.35	59107	45185
LA	03	3	31.7	26.1	91.0	99.0	0.82	21.8	18.1	87.0	91.0	0.83	9.9	8.0	104.0	98.0	0.80	41649	32467
LA	03	4	20.0	8.1	NA	NA	NA	12.0	5.4	NA	NA	NA	8.0	2.7	NA	NA	NA	250	369
ME	01	1	18.8	12.4	97.0	16.0	0.66	14.1	8.8	97.0	21.0	0.62	4.7	3.7	104.0	48.0	0.77	84721	61558
ME	01	2	18.9	12.5	163.0	36.5	0.66	14.2	9.8	147.0	32.0	0.62	4.8	3.7	168.0	135.0	0.77	83471	63729
ME	01	3	17.6	8.7	NA	NA	NA	15.1	4.3	NA	NA	NA	2.5	4.3	NA	NA	NA	398	230
ME	01	4	10.6	6.7	NA	NA	NA	5.9	5.0	NA	NA	NA	4.7	1.7	NA	NA	NA	852	599
MD	01	1	18.7	13.6	94.0	48.0	0.73	14.8	10.3	133.0	68.0	0.69	3.9	3.4	36.0	24.0	0.87	22698	15698
MD	01	2	18.1	13.4	134.0	80.0	0.74	14.7	10.0	172.0	96.0	0.68	3.5	3.4	34.5	64.0	0.99	21732	14954
MD	01	3	35.5	20.7	NA	NA	NA	20.6	17.5	NA	NA	NA	14.9	3.2	NA	NA	NA	872	628
MD	01	4	-	-	NA	NA	NA	-	-	NA	NA	NA	-	-	NA	NA	NA	94	116
MD	02	1	13.6	12.8	2.0	28.0	0.94	10.5	9.9	5.0	54.0	0.95	3.1	2.9	3.0	5.0	0.92	37127	26548
MD	02	2	12.7	12.2	2.0	26.0	0.96	9.8	9.6	2.0	65.0	0.99	3.0	2.5	7.0	4.0	0.95	33332	22451
MD	02	3	25.7	17.5	16.0	7.0	0.68	20.6	12.9	67.0	20.0	0.62	5.1	4.6	5.0	7.0	0.90	2914	3031
MD	02	4	6.8	12.2	NA	45.0	NA	4.5	7.5	NA	46.0	NA	2.3	4.7	NA	45.0	NA	881	1066
MD	03	1	17.3	16.1	54.0	138.0	0.93	13.0	12.3	58.0	161.0	0.94	4.3	3.8	65.0	56.0	0.88	76758	48022
MD	03	2	14.8	13.7	12.0	93.0	0.92	11.5	10.5	20.0	127.5	0.91	3.4	3.2	28.0	37.0	0.94	59488	31639
MD	03	3	27.4	22.3	36.0	36.0	0.80	19.6	16.8	44.0	69.0	0.86	7.9	5.2	44.0	13.0	0.66	16044	15162
MD	03	4	3.3	5.7	1.0	13.0	1.76	3.3	4.9	2.0	21.0	1.51	-	0.8	-	5.0	-	1226	1221
MD	04	1	18.6	17.1	92.0	158.0	0.92	13.4	13.0	74.0	173.0	0.97	5.2	4.1	141.0	92.0	0.79	159117	133167
MD	04	2	15.0	13.9	17.0	113.5	0.93	11.1	10.6	11.0	142.0	0.95	3.9	3.3	90.0	52.0	0.85	108396	73180
MD	04	3	26.9	24.2	29.0	69.0	0.90	18.7	18.2	31.0	94.0	0.98	8.2	5.9	55.0	22.0	0.72	48689	35181
MD	04	4	12.3	7.2	39.0	25.0	0.59	9.3	5.5	42.0	31.0	0.59	3.0	1.7	24.0	17.0	0.56	2032	1806
MD	05	1	21.4	16.3	162.0	135.0	0.75	15.3	11.4	142.0	124.0	0.75	6.1	4.6	171.0	135.0	0.75	19635	14398
MD	05	2	16.8	13.7	78.0	96.0	0.81	12.4	10.0	58.0	90.0	0.81	4.4	3.7	148.0	139.0	0.84	14225	10523
MD	05	3	34.1	22.4	127.0	37.0	0.66	23.5	15.6	114.0	46.0	0.66	10.6	6.9	117.0	53.0	0.65	5284	3793
MD	05	4	7.9	12.2	NA	NA	NA	-	-	NA	NA	NA	7.9	12.2	NA	NA	NA	126	82
MAS	01	1	16.9	13.3	43.0	33.0	0.77	13.0	9.5	57.0	40.0	0.73	3.9	3.5	40.0	29.0	0.89	58494	37735
MAS	01	2	16.5	12.5	61.0	39.0	0.76	12.7	9.2	77.0	47.0	0.72	3.7	3.3	60.0	50.0	0.89	54816	35151
MAS	01	3	26.2	21.5	21.0	30.0	0.82	19.4	15.8	40.0	50.0	0.81	6.8	5.7	17.0	17.0	0.94	3246	2281
MAS	01	4	4.6	3.3	NA	NA	NA	-	-	NA	NA	NA	4.6	3.3	NA	NA	NA	432	303

Infant, neonatal, and postneonatal mortality rates, corresponding ranks, and ratios of change by race: U.S. health service areas (HSA's), 1969-73 and 1974-77—Con.

HSA	R	-----INFANT-----					-----NEONATAL-----					-----POSTNEONATAL-----					BIRTHS	
		RATE		RANK		RATIO	RATE		RANK		RATIO	RATE		RANK		RATIO	1969	1974
		1969	1974	1969	1974	<u>74-77</u> 69-73	1969	1974	1969	1974	<u>74-77</u> 69-73	1969	1974	1969	1974	<u>74-77</u> 69-73	-73	-77
MAS	02 1	17.8	13.1	68.0	34.0	0.74	14.2	9.7	101.0	48.0	0.69	3.6	3.3	16.0	23.0	0.93	47624	32659
MAS	02 2	17.5	13.0	106.0	54.0	0.74	14.1	9.8	142.0	77.0	0.70	3.5	3.2	36.0	34.0	0.92	46594	31614
MAS	02 3	39.0	21.3	NA	NA	NA	26.5	9.9	NA	NA	NA	12.5	11.1	NA	NA	NA	718	809
MAS	02 4	3.2	-	NA	NA	NA	-	-	NA	NA	NA	3.2	-	NA	NA	NA	312	236
MAS	03 1	15.2	11.8	13.0	5.0	0.78	12.1	9.1	26.0	27.0	0.76	3.2	2.7	5.0	3.0	0.84	149322	92633
MAS	03 2	15.2	11.8	25.0	14.0	0.77	12.0	9.1	44.0	42.0	0.76	3.2	2.6	18.0	8.0	0.83	145508	89123
MAS	03 3	24.5	16.3	12.0	5.0	0.67	19.3	11.9	38.0	11.0	0.62	5.2	4.4	7.0	5.0	0.94	2491	2270
MAS	03 4	5.3	8.1	5.0	32.0	1.52	4.5	5.6	13.0	34.0	1.24	0.8	2.4	3.0	28.0	3.20	1323	1240
MAS	04 1	18.4	14.4	85.0	72.0	0.78	14.6	11.1	121.0	110.0	0.76	3.8	3.3	32.0	21.0	0.85	95416	57215
MAS	04 2	16.2	13.2	58.0	61.0	0.81	13.0	10.5	88.0	130.0	0.80	3.2	2.7	19.0	11.0	0.85	79519	45256
MAS	04 3	31.2	20.2	81.0	18.0	0.65	23.8	14.5	118.0	30.0	0.61	7.4	5.7	32.0	18.0	0.77	14457	10826
MAS	04 4	11.1	7.9	34.0	31.0	0.71	7.6	5.3	34.5	27.0	0.69	3.5	2.6	29.0	31.0	0.76	1440	1133
MAS	05 1	15.3	12.8	15.0	30.0	0.84	11.4	9.6	13.0	41.0	0.84	3.8	3.2	30.0	13.0	0.94	72509	52135
MAS	05 2	15.2	12.7	28.0	43.0	0.84	11.3	9.5	17.0	61.0	0.84	3.9	3.2	77.5	39.0	0.83	70594	50717
MAS	05 3	23.2	22.5	7.0	NA	NA	19.7	18.4	45.0	NA	NA	3.5	4.1	3.0	NA	NA	1424	978
MAS	05 4	2.0	-	NA	NA	NA	2.0	-	NA	NA	NA	-	-	NA	NA	NA	491	440
MIC	01 1	20.2	16.7	135.0	149.0	0.82	15.3	12.2	143.0	158.0	0.80	4.9	4.5	118.0	128.0	0.91	414653	268986
MIC	01 2	16.7	13.4	69.0	76.0	0.80	13.0	13.0	87.0	87.0	0.76	3.6	3.4	47.0	56.0	0.94	311501	197946
MIC	01 3	31.7	26.5	90.0	102.0	0.84	22.7	18.8	102.0	105.0	0.83	8.9	7.7	81.0	88.0	0.86	100225	68506
MIC	01 4	7.5	8.3	12.0	34.0	1.10	4.8	6.7	14.0	43.0	1.40	2.7	1.6	21.0	16.0	0.58	2927	2534
MIC	02 1	18.9	14.2	100.0	65.0	0.75	14.3	10.5	106.0	82.0	0.73	4.6	3.7	89.0	53.0	0.81	57958	40699
MIC	02 2	18.2	13.4	137.0	75.0	0.73	13.7	9.9	121.0	79.0	0.72	4.6	3.5	160.0	78.0	0.77	54367	37946
MIC	02 3	32.3	28.8	102.0	132.0	0.89	26.6	21.3	149.0	140.0	0.80	5.7	7.5	9.0	83.0	1.32	3160	2397
MIC	02 4	4.6	5.6	NA	NA	NA	4.6	2.8	NA	NA	NA	-	2.8	NA	NA	NA	431	356
MIC	03 1	19.6	15.8	118.0	121.0	0.81	14.7	10.7	126.0	89.5	0.73	4.9	5.1	112.5	166.0	1.04	64719	46205
MIC	03 2	18.0	13.7	129.0	95.0	0.76	13.5	9.7	111.0	71.0	0.72	4.5	3.9	153.0	139.0	0.88	56767	39828
MIC	03 3	32.0	30.3	94.0	141.0	0.95	23.8	17.5	119.0	79.0	0.73	8.2	12.8	54.0	156.0	1.57	7596	5997
MIC	03 4	5.6	5.3	NA	NA	NA	5.6	2.6	NA	NA	NA	-	2.6	NA	NA	NA	356	380
MIC	04 1	17.6	13.9	64.0	55.0	0.79	13.2	9.4	64.0	36.0	0.71	4.4	4.5	77.0	133.0	1.03	85164	64983
MIC	04 2	16.7	13.0	70.0	53.0	0.78	12.6	8.8	68.0	29.0	0.70	4.1	4.2	109.0	156.0	1.02	78436	59552
MIC	04 3	30.1	26.0	69.0	97.0	0.87	22.3	17.3	97.0	76.0	0.78	7.8	8.7	40.0	119.0	1.12	6283	4918
MIC	04 4	9.0	5.8	NA	NA	NA	-	1.9	NA	NA	NA	9.0	3.9	NA	NA	NA	445	513
MIC	05 1	20.0	17.2	128.0	161.0	0.86	15.6	11.7	150.0	137.0	0.75	4.4	5.6	81.0	183.0	1.25	55616	37254
MIC	05 2	18.0	15.1	127.0	166.0	0.84	13.8	10.4	131.0	123.0	0.76	4.2	4.6	124.0	183.0	1.11	46697	30558
MIC	05 3	31.2	27.4	83.0	114.0	0.88	25.2	17.7	139.0	84.0	0.70	6.1	9.7	14.0	138.0	1.61	8738	6572
MIC	05 4	-	16.1	NA	NA	NA	-	-	NA	NA	NA	-	16.1	NA	NA	NA	181	124
MIC	06 1	18.0	14.6	77.0	84.0	0.81	13.8	10.8	87.0	95.0	0.78	4.2	3.8	59.0	62.0	0.91	63669	46489
MIC	06 2	17.0	14.2	87.0	136.0	0.84	13.0	10.8	84.0	150.0	0.83	4.0	3.5	96.0	75.0	0.97	58916	42602
MIC	06 3	31.7	19.6	92.0	16.0	0.62	25.2	12.2	140.0	14.0	0.48	6.5	7.4	15.0	77.0	1.13	4448	3522
MIC	06 4	19.7	8.2	NA	NA	NA	16.4	2.7	NA	NA	NA	3.3	5.5	NA	NA	NA	305	365

Infant, neonatal, and postneonatal mortality rates, corresponding ranks, and ratios of change by race: U.S. health service areas (HSA's), 1969-73 and 1974-77—Con.

HSA	R	-----INFANT-----					-----NEONATAL-----					-----POSTNEONATAL-----					BIRTHS	
		RATE		RANK		RATIO	RATE		RANK		RATIO	RATE		RANK		RATIO	1969	1974
		1969 -73	1974 -77	1969 -73	1974 -77	74-77 69-73	1969 -73	1974 -77	1969 -73	1974 -77	74-77 69-73	1969 -73	1974 -77	1969 -73	1974 -77	74-77 69-73	-73	-77
MIC 07 1		18.9	12.9	101.0	31.0	0.68	14.1	8.7	98.0	20.0	0.62	4.8	4.2	108.0	96.0	0.87	21665	17281
MIC 07 2		18.8	12.9	160.0	51.0	0.69	14.3	8.8	153.0	30.0	0.62	4.5	4.1	158.0	150.0	0.90	21333	17032
MIC 07 3		17.2	-	NA	NA	NA	-	-	NA	NA	NA	17.2	-	NA	NA	NA	58	15
MIC 07 4		25.5	12.8	NA	NA	NA	3.6	4.3	NA	NA	NA	21.9	8.5	NA	NA	NA	274	234
MIC 08 1		17.1	14.3	50.0	69.0	0.84	13.5	13.4	77.0	78.5	0.78	3.6	3.8	15.0	55.0	1.07	24804	19545
MIC 08 2		16.8	14.6	80.0	151.0	0.86	13.4	10.7	100.0	145.0	0.80	3.5	3.9	37.0	134.0	1.12	24112	18762
MIC 08 3		12.4	4.7	NA	NA	NA	12.4	4.7	NA	NA	NA	-	-	NA	NA	NA	241	211
MIC 08 4		31.0	8.7	NA	NA	NA	20.0	5.2	NA	NA	NA	11.1	3.5	NA	NA	NA	451	572
MIN 04 1		15.8	13.4	19.0	42.0	0.85	12.1	9.7	27.0	46.0	0.80	3.7	3.7	22.0	51.0	1.01	31223	26843
MIN 04 2		15.9	13.3	46.0	66.5	0.83	12.3	9.7	54.0	70.0	0.79	3.7	3.6	53.0	88.0	0.97	30829	26387
MIN 04 3		-	30.3	NA	NA	NA	-	-	NA	NA	NA	-	30.3	NA	NA	NA	21	33
MIN 04 4		5.4	21.3	NA	NA	NA	-	9.5	NA	NA	NA	5.4	11.8	NA	NA	NA	373	423
MIN 05 1		16.8	13.1	36.0	36.0	0.78	12.8	9.5	48.0	37.0	0.74	4.0	3.6	47.0	42.0	0.91	159319	109129
MIN 05 2		16.4	12.4	60.0	35.0	0.76	12.6	9.2	74.0	49.0	0.73	3.8	3.2	64.0	40.0	0.85	151837	102023
MIN 05 3		27.9	24.0	43.0	64.0	0.86	20.0	16.1	51.0	57.0	0.80	7.9	7.9	46.0	93.0	1.00	4692	4298
MIN 05 4		17.6	20.3	47.0	63.0	1.16	10.8	9.6	46.0	58.0	0.89	6.8	10.7	45.0	65.0	1.57	2790	2808
MIN 06 1		16.9	13.8	42.0	51.5	0.81	13.7	9.5	86.0	39.0	0.69	3.2	4.3	4.0	104.0	1.34	37300	31038
MIN 06 2		16.7	13.8	75.0	102.0	0.82	13.6	9.6	119.0	62.0	0.70	3.1	4.2	12.0	159.0	1.34	37159	30821
MIN 06 3		-	-	NA	NA	NA	-	-	NA	NA	NA	-	-	NA	NA	NA	48	21
MIN 06 4		86.0	15.3	NA	NA	NA	64.5	-	NA	NA	NA	21.5	15.3	NA	NA	NA	93	196
MIN 07 1		17.4	12.3	61.0	14.0	0.71	13.6	9.7	81.0	49.0	0.72	3.8	2.5	31.0	2.0	0.56	30180	22976
MIN 07 2		17.5	12.4	105.0	32.0	0.71	13.6	9.8	120.0	78.0	0.72	3.9	2.5	74.5	5.0	0.66	30018	22773
MIN 07 3		-	-	NA	NA	NA	-	-	NA	NA	NA	-	-	NA	NA	NA	64	44
MIN 07 4		-	-	NA	NA	NA	-	-	NA	NA	NA	-	-	NA	NA	NA	98	159
MIS 01 1		27.9	21.2	201.0	198.0	0.76	19.6	14.8	201.0	196.0	0.75	8.3	6.5	198.0	196.0	0.78	235317	176357
MIS 01 2		19.3	14.4	175.0	140.0	0.75	15.7	10.9	192.5	155.0	0.69	3.6	3.6	45.0	85.5	0.99	121773	91951
MIS 01 3		37.5	28.8	147.0	131.0	0.77	24.1	19.0	123.0	115.0	0.79	13.5	9.7	147.0	137.0	0.72	112274	83205
MIS 01 4		8.7	20.0	18.0	61.0	2.31	6.3	15.0	22.0	67.0	2.38	2.4	5.0	17.0	46.0	2.12	1270	1201
MO 02 1		18.3	15.1	83.0	104.0	0.82	14.4	11.4	110.0	118.0	0.79	3.9	3.7	41.0	54.0	0.95	74515	60666
MO 02 2		17.8	14.9	119.0	162.0	0.84	14.1	11.3	143.0	173.0	0.80	3.7	3.6	57.0	99.5	0.98	71135	57622
MO 02 3		33.3	23.2	117.0	49.0	0.70	24.0	16.0	121.0	53.0	0.67	9.3	7.2	91.0	71.0	0.78	2915	2504
MO 02 4		6.5	-	NA	NA	NA	4.3	-	NA	NA	NA	2.2	-	NA	NA	NA	465	540
MO 04 1		18.3	15.3	82.0	110.0	0.84	14.0	11.1	93.0	108.0	0.79	4.3	4.2	70.0	101.0	0.98	40654	32127
MO 04 2		18.2	15.1	135.0	170.0	0.83	13.9	10.9	135.0	159.0	0.78	4.2	4.2	134.5	163.0	0.99	40066	31616
MO 04 3		44.6	34.1	NA	NA	NA	31.5	27.3	NA	NA	NA	13.1	6.8	NA	NA	NA	381	293
MO 04 4		-	18.3	NA	NA	NA	-	13.8	NA	NA	NA	-	4.6	NA	NA	NA	207	218
MO 05 1		22.0	16.8	172.5	151.0	0.76	16.1	11.8	165.0	144.0	0.73	5.9	5.0	167.0	158.0	0.94	37558	29969
MO 05 2		20.3	15.6	191.0	181.0	0.77	15.6	11.3	191.0	175.0	0.72	4.7	4.3	167.0	167.0	0.91	33854	27248
MO 05 3		38.0	30.5	150.0	143.0	0.80	20.7	18.2	70.0	93.0	0.88	17.3	12.4	157.0	155.0	0.71	3577	2588
MO 05 4		31.5	-	NA	NA	NA	31.5	-	NA	NA	NA	-	-	NA	NA	NA	127	133

Infant, neonatal, and postneonatal mortality rates, corresponding ranks, and ratios of change by race: U.S. health service areas (HSA's), 1969-73 and 1974-77—Con.

HSA	R	-----INFANT-----					-----NEONATAL-----					-----POSTNEONATAL-----					BIRTHS	
		RATE		RANK		RATIO	RATE		RANK		RATIO	RATE		RANK		RATIO	1969	1974
		1969 -73	1974 -77	1969 -73	1974 -77	74-77 69-73	1969 -73	1974 -77	1969 -73	1974 -77	74-77 69-73	1969 -73	1974 -77	1969 -73	1974 -77	74-77 69-73	-73	-77
MON 01 1	1	20.9	15.5	151.0	112.0	0.74	15.2	10.9	139.0	100.0	0.72	5.7	4.6	157.0	137.0	0.83	59543	50239
MON 01 2	2	20.4	15.5	193.0	179.0	0.76	15.1	11.3	183.0	172.0	0.74	5.3	4.2	191.0	164.0	0.80	53969	45042
MON 01 3	3	24.3	16.7	NA	NA	NA	13.9	12.5	NA	NA	NA	10.4	4.2	NA	NA	NA	288	240
MON 01 4	4	25.5	15.7	59.0	54.0	0.62	15.7	7.7	64.0	47.0	0.49	9.8	8.1	51.0	59.0	0.82	5286	4957
NEB 01 1	1	17.8	14.1	73.0	58.0	0.79	14.8	10.6	127.0	85.0	0.72	3.1	3.5	2.0	31.0	1.14	46801	39542
NEB 01 2	2	17.5	14.0	108.5	117.0	0.80	14.8	10.6	176.0	139.0	0.72	2.8	3.4	1.0	68.0	1.24	45835	38721
NEB 01 3	3	25.3	14.1	NA	NA	NA	25.3	14.1	NA	NA	NA	-	-	NA	NA	NA	79	71
NEB 01 4	4	31.6	17.3	NA	NA	NA	13.5	10.7	NA	NA	NA	18.0	6.7	NA	NA	NA	887	750
NEB 02 1	1	14.5	11.6	7.0	3.0	0.80	11.2	8.0	10.0	4.0	0.71	3.4	3.6	8.0	43.5	1.37	26301	23708
NEB 02 2	2	14.5	11.6	8.0	11.0	0.80	11.1	7.9	12.0	5.0	0.71	3.3	3.7	25.0	104.0	1.10	25711	23158
NEB 02 3	3	22.6	21.2	NA	NA	NA	14.1	17.7	NA	NA	NA	8.5	3.5	NA	NA	NA	354	283
NEB 02 4	4	12.7	-	NA	NA	NA	12.7	-	NA	NA	NA	-	-	NA	NA	NA	236	267
NEV 01 1	1	19.6	17.4	120.0	165.0	0.89	14.1	12.1	99.0	152.0	0.85	5.5	5.3	146.0	174.0	0.97	18248	15164
NEV 01 2	2	19.6	17.3	186.0	198.0	0.88	14.5	11.8	166.0	187.0	0.82	5.1	5.5	187.0	200.0	1.07	16786	13865
NEV 01 3	3	22.0	23.3	NA	NA	NA	12.6	19.4	NA	NA	NA	9.4	3.9	NA	NA	NA	318	258
NEV 01 4	4	19.2	17.3	49.0	57.0	0.90	9.6	13.4	43.0	64.0	1.40	9.6	3.8	50.0	38.0	0.40	1144	1041
NEV 02 1	1	20.5	15.6	146.0	117.0	0.76	15.0	10.4	135.0	78.5	0.70	5.7	5.2	153.0	172.0	0.92	27655	22708
NEV 02 2	2	19.2	14.0	173.0	120.0	0.73	14.0	9.4	141.0	56.0	0.67	5.2	4.6	189.0	182.0	0.89	22510	18209
NEV 02 3	3	30.1	26.2	70.0	101.0	0.87	21.3	17.4	78.0	78.0	0.82	8.9	8.7	79.0	118.0	0.98	4516	3669
NEV 02 4	4	3.2	4.8	NA	NA	NA	3.2	2.4	NA	NA	NA	-	2.4	NA	NA	NA	629	830
N H 01 1	1	17.9	12.2	74.0	13.0	0.68	13.4	9.3	75.0	34.0	0.70	4.4	2.9	83.0	6.0	0.64	63149	46004
N H 01 2	2	17.9	12.3	125.0	28.0	0.69	13.5	9.4	107.0	54.0	0.69	4.4	2.9	146.0	22.0	0.66	62452	45406
N H 01 3	3	27.8	14.4	NA	NA	NA	8.3	14.4	NA	NA	NA	19.4	-	NA	NA	NA	360	277
N H 01 4	4	5.9	3.1	NA	NA	NA	5.9	3.1	NA	NA	NA	-	-	NA	NA	NA	337	321
N J 01 1	1	17.0	12.5	45.0	23.0	0.74	13.0	9.3	56.0	31.0	0.71	4.0	3.2	44.5	15.0	0.82	90334	59525
N J 01 2	2	15.3	11.1	31.0	1.0	0.73	12.0	8.6	47.0	23.0	0.72	3.2	2.4	22.0	3.0	0.75	78832	51863
N J 01 3	3	30.5	24.4	74.0	75.0	0.80	21.0	14.9	74.0	34.0	0.71	9.4	9.5	95.0	130.0	1.01	10602	6722
N J 01 4	4	6.7	7.4	NA	NA	NA	5.6	6.4	NA	NA	NA	1.1	1.1	NA	NA	NA	900	940
N J 02 1	1	20.4	16.4	140.0	146.0	0.80	15.8	12.0	159.0	150.0	0.76	4.6	4.4	92.0	113.0	0.94	153156	100820
N J 02 2	2	15.5	13.5	36.0	85.0	0.87	12.6	10.6	71.0	137.5	0.84	2.9	2.9	4.0	23.0	1.32	108612	79249
N J 02 3	3	32.1	23.1	96.0	47.0	0.72	23.5	15.4	116.0	43.0	0.65	8.6	7.7	71.0	86.0	0.89	43011	29209
N J 02 4	4	40.4	19.8	65.0	59.0	0.49	24.1	13.9	65.0	66.0	0.58	16.3	5.9	60.0	54.0	0.36	1533	1362
N J 03 1	1	21.6	18.2	165.0	177.0	0.84	16.5	13.4	176.0	182.0	0.81	5.1	4.8	129.0	152.0	0.95	48737	32445
N J 03 2	2	18.6	15.1	151.0	168.0	0.81	14.5	11.5	165.0	180.0	0.79	4.1	3.6	119.0	94.0	0.87	38439	25311
N J 03 3	3	33.5	30.4	121.0	142.0	0.91	24.5	23.7	130.0	134.0	0.85	9.0	9.7	82.0	136.0	1.37	9844	6703
N J 03 4	4	13.2	11.6	NA	NA	NA	13.2	9.3	NA	NA	NA	-	2.3	NA	NA	NA	454	431
N J 04 1	1	16.5	13.4	30.0	41.0	0.81	12.9	10.1	51.0	62.0	0.79	3.6	3.2	19.0	17.0	0.89	140470	96672
N J 04 2	2	15.0	11.7	18.0	12.0	0.78	11.9	8.9	40.0	36.0	0.75	3.1	2.7	11.0	13.0	0.88	123005	83189
N J 04 3	3	28.1	25.3	46.0	85.0	0.90	20.3	18.7	58.0	99.0	0.92	7.8	6.7	42.0	41.0	0.95	16249	12158
N J 04 4	4	11.5	9.1	36.0	35.0	0.79	9.0	5.3	40.0	26.0	0.58	2.5	3.8	18.0	37.0	1.53	1216	1325

Infant, neonatal, and postneonatal mortality rates, corresponding ranks, and ratios of change by race: U.S. health service areas (HSA's), 1969-73 and 1974-77--Con.

HSA	R	-----INFANT-----					-----NEONATAL-----					-----POSTNEONATAL-----					BIRTHS	
		RATE		RANK		RATIO	RATE		RANK		RATIO	RATE		RANK		RATIO	1969	1974
		1969 -73	1974 -77	1969 -73	1974 -77	74-77 69-73	1969 -73	1974 -77	1969 -73	1974 -77	74-77 69-73	1969 -73	1974 -77	1969 -73	1974 -77	74-77 69-73	1969 -73	1974 -77
N J 05 1		18.9	16.3	102.5	134.0	0.84	14.5	12.0	118.0	149.0	0.83	4.4	4.0	79.0	80.0	0.90	113853	82262
N J 05 2		15.7	13.4	40.0	78.0	0.85	12.4	10.4	61.0	121.0	0.84	3.3	3.0	23.0	24.0	0.92	94025	66575
N J 05 3		35.5	27.9	137.0	116.0	0.79	25.2	19.7	141.0	122.0	0.78	10.2	8.2	111.0	106.0	0.80	18954	14952
N J 05 4		9.2	4.1	NA	NA	NA	6.9	1.4	NA	NA	NA	2.3	2.7	NA	NA	NA	874	735
N M 01 1		20.8	16.1	148.0	139.0	0.77	14.5	10.6	113.0	83.0	0.73	6.4	5.5	176.0	179.0	0.87	107350	87475
N M 01 2		19.3	15.4	177.0	177.0	0.80	14.4	10.6	160.0	143.0	0.74	4.9	4.8	178.0	190.5	0.97	91013	73095
N M 01 3		32.9	29.3	109.0	133.0	0.88	21.9	20.4	91.0	131.0	0.93	11.0	8.6	129.0	116.0	0.79	2556	2209
N M 01 4		28.7	17.9	61.0	58.0	0.62	13.7	8.3	61.0	51.0	0.61	14.9	9.6	58.0	63.0	0.54	13781	12171
N Y 01 1		18.5	15.9	89.0	132.0	0.86	14.4	12.0	108.5	151.0	0.84	4.1	3.9	53.0	78.0	0.96	134396	88718
N Y 01 2		16.9	14.3	86.0	116.0	0.83	13.3	10.7	97.0	146.0	0.80	3.7	3.3	52.0	47.0	0.91	119261	78031
N Y 01 3		32.9	32.7	110.0	152.0	0.99	24.8	23.8	135.0	151.0	0.96	8.1	8.9	52.0	122.0	1.10	13446	9299
N Y 01 4		13.0	13.7	40.0	50.0	1.05	8.9	8.6	39.0	53.0	0.97	4.1	5.0	37.0	47.0	1.22	1689	1388
N Y 02 1		16.8	13.3	37.0	40.0	0.79	12.6	9.8	39.0	52.0	0.78	4.2	3.5	64.0	37.0	0.84	97195	64187
N Y 02 2		15.8	12.1	42.0	23.0	0.77	11.9	9.0	38.0	37.0	0.75	3.9	3.1	72.5	31.0	0.81	87077	56341
N Y 02 3		26.8	23.6	28.0	56.0	0.88	19.2	16.6	35.5	67.0	0.87	7.6	7.0	35.0	60.0	0.92	9430	7150
N Y 02 4		8.7	8.6	NA	NA	NA	4.4	7.2	NA	NA	NA	4.4	1.4	NA	NA	NA	688	696
N Y 03 1		17.7	14.6	65.0	86.0	0.83	13.3	10.8	65.5	96.0	0.82	4.4	3.8	80.0	64.0	0.86	115015	77979
N Y 03 2		16.8	14.2	79.0	130.0	0.84	12.6	10.6	70.0	140.0	0.84	4.2	3.6	131.0	95.0	0.86	108730	72723
N Y 03 3		36.4	23.6	143.0	57.0	0.65	27.5	16.5	153.0	62.0	0.60	8.9	7.2	80.0	70.0	0.81	5169	4187
N Y 03 4		16.1	10.3	43.0	40.0	0.64	11.6	5.6	50.0	33.0	0.48	4.5	4.7	38.0	44.0	1.04	1116	1069
N Y 05 1		17.4	14.3	60.0	56.0	0.80	13.2	10.3	63.0	72.0	0.78	4.2	3.6	60.0	45.0	0.87	102556	69256
N Y 05 2		16.9	13.4	83.0	81.0	0.80	12.8	10.0	80.0	92.0	0.78	4.1	3.4	110.0	71.0	0.84	98164	65878
N Y 05 3		34.0	28.1	126.0	117.0	0.83	26.8	19.6	151.0	120.0	0.73	7.2	8.5	27.0	115.0	1.18	3621	2709
N Y 05 4		5.2	7.5	NA	NA	NA	5.2	6.0	NA	NA	NA	-	1.5	NA	NA	NA	771	669
N Y 06 1		16.7	13.6	33.0	46.0	0.81	12.8	10.2	50.0	64.0	0.79	3.9	3.4	34.0	26.0	0.88	129470	90195
N Y 06 2		15.2	12.2	23.0	27.0	0.81	11.7	9.2	30.0	48.0	0.78	3.4	3.1	33.0	26.0	0.89	113599	77980
N Y 06 3		29.9	24.3	68.0	71.0	0.81	22.6	18.3	100.0	95.0	0.81	7.4	6.0	31.0	25.0	0.82	14499	13605
N Y 06 4		5.1	7.5	4.0	28.0	1.46	3.6	5.0	10.0	22.0	1.36	1.5	2.5	8.0	30.0	1.70	1372	1610
N Y 07 1		21.1	17.9	158.0	174.0	0.85	15.6	13.1	153.0	178.0	0.84	5.5	4.8	145.0	150.0	0.88	630991	423583
N Y 07 2		17.4	14.6	102.0	154.0	0.84	13.2	10.9	94.0	156.0	0.82	4.2	3.8	136.0	115.0	0.89	427826	264246
N Y 07 3		30.2	24.6	72.0	78.0	0.82	21.8	17.7	88.0	86.0	0.81	8.4	6.9	64.0	54.0	0.82	190053	145969
N Y 07 4		9.2	9.2	23.0	36.0	1.01	6.6	6.4	28.0	40.0	0.97	2.5	2.8	19.0	32.0	1.10	13112	13368
N Y 08 1		15.4	12.5	17.0	20.0	0.81	11.8	9.3	22.0	35.0	0.79	3.6	3.1	12.0	10.0	0.88	170798	121494
N Y 08 2		14.1	11.1	4.0	2.0	0.79	11.0	8.4	10.0	17.0	0.76	3.1	2.7	10.0	9.0	0.88	155430	109568
N Y 08 3		29.8	26.8	67.0	104.0	0.90	21.2	19.3	75.0	118.0	0.91	8.7	7.4	73.0	78.0	0.86	14309	13760
N Y 08 4		9.4	12.9	27.0	47.0	1.36	5.7	9.4	19.0	57.0	1.67	3.8	3.4	36.0	36.0	0.91	1059	1166
N C 01 1		24.4	17.5	193.0	168.0	0.72	18.7	12.8	200.0	170.0	0.69	5.7	4.7	158.0	142.0	0.82	73539	51700
N C 01 2		23.3	15.9	201.0	187.0	0.69	18.0	11.9	201.0	189.0	0.66	5.0	3.9	180.0	136.0	0.78	65328	45858
N C 01 3		37.3	32.1	146.0	150.0	0.86	25.4	21.0	143.0	139.0	0.83	11.8	11.1	135.0	150.0	0.94	7429	5143
N C 01 4		20.5	18.6	NA	NA	NA	11.5	10.0	NA	NA	NA	9.0	8.6	NA	NA	NA	782	699

Infant, neonatal, and postneonatal mortality rates, corresponding ranks, and ratios of change by race: U.S. health service areas (HSA's), 1969-73 and 1974-77—Con.

HSA	R	-----INFANT-----					-----NEONATAL-----					-----POSTNEONATAL-----					BIRTHS	
		RATE		RANK		RATIO	RATE		RANK		RATIO	RATE		RANK		RATIO		
		1969 -73	1974 -77	1969 -73	1974 -77	<u>74-77</u> <u>69-73</u>	1969 -73	1974 -77	1969 -73	1974 -77	<u>74-77</u> <u>69-73</u>	1969 -73	1974 -77	1969 -73	1974 -77	<u>74-77</u> <u>69-73</u>			1969 -73	1974 -77
N C 02 1		21.2	16.7	160.0	150.0	0.79	15.4	12.6	145.0	166.0	0.82	5.8	4.1	162.0	97.0	0.71	83766	55488
N C 02 2		17.7	14.2	117.0	134.0	0.80	13.2	11.0	95.0	161.0	0.83	4.5	3.2	156.0	41.5	0.72	63021	41277
N C 02 3		32.3	24.4	104.0	72.0	0.75	22.5	17.7	99.0	85.0	0.79	9.8	6.7	102.0	40.0	0.58	20315	13827
N C 02 4		2.3	5.2	NA	NA	NA	2.3	2.6	NA	NA	NA	-	2.6	NA	NA	NA	430	384
N C 03 1		21.9	16.8	170.0	152.0	0.77	15.9	12.5	163.0	165.0	0.78	6.0	4.4	170.0	116.5	0.74	79117	52346
N C 03 2		18.0	13.6	130.0	89.0	0.76	13.7	10.0	123.0	88.5	0.73	4.3	3.6	139.0	131.0	0.85	58599	37964
N C 03 3		32.7	26.3	106.0	98.0	0.80	21.8	19.5	89.0	119.0	0.89	10.9	6.6	127.0	37.0	0.60	20040	13979
N C 03 4		50.2	5.3	NA	NA	NA	41.8	5.0	NA	NA	NA	8.4	-	NA	NA	NA	478	403
N C 04 1		22.1	16.4	174.0	145.0	0.74	16.2	11.5	169.0	131.0	0.71	5.9	4.8	166.0	151.0	0.82	57513	41024
N C 04 2		15.8	11.9	43.0	18.0	0.76	12.7	8.9	75.0	33.0	0.70	3.1	3.1	13.5	27.0	0.98	37138	25692
N C 04 3		33.8	24.4	125.0	73.0	0.72	22.9	16.5	103.0	60.0	0.72	10.9	7.9	128.0	94.0	0.72	20015	14893
N C 04 4		13.9	2.3	NA	NA	NA	11.1	-	NA	NA	NA	2.8	2.3	NA	NA	NA	360	439
N C 05 1		24.4	18.6	192.0	182.0	0.76	16.8	12.6	185.0	167.0	0.75	7.6	6.0	194.0	189.0	0.79	79355	61260
N C 05 2		18.6	15.6	154.0	184.0	0.84	14.5	11.6	167.0	183.0	0.80	4.1	4.0	123.0	147.5	0.98	47509	35098
N C 05 3		35.5	23.9	139.0	63.0	0.67	22.5	15.1	98.0	36.0	0.67	13.1	8.9	145.0	121.0	0.68	25407	21528
N C 05 4		23.0	17.2	54.0	56.0	0.75	11.6	9.9	49.0	59.0	0.85	11.3	7.3	54.0	56.0	0.64	6439	5634
N C 06 1		25.0	20.0	196.0	195.0	0.80	17.5	14.1	195.0	192.0	0.81	7.5	5.9	193.0	188.0	0.79	88738	68544
N C 06 2		18.5	15.1	145.0	169.0	0.82	14.4	11.5	159.0	181.0	0.80	4.1	3.6	121.0	93.0	0.97	52648	39601
N C 06 3		34.7	27.3	133.0	113.0	0.79	22.2	18.1	96.0	92.0	0.82	12.4	9.2	139.0	124.0	0.74	35352	28097
N C 06 4		24.4	7.1	NA	NA	NA	19.0	2.4	NA	NA	NA	5.4	4.7	NA	NA	NA	738	846
N D 01 1		16.3	14.7	23.0	89.0	0.90	12.5	11.2	37.0	111.0	0.89	3.8	3.5	26.0	32.5	0.93	24119	19696
N D 01 2		15.7	14.3	38.0	138.0	0.91	12.5	11.1	64.0	165.0	0.89	3.2	3.2	17.0	33.0	0.99	22662	18351
N D 01 3		30.7	21.5	NA	NA	NA	30.7	16.1	NA	NA	NA	-	5.4	NA	NA	NA	228	186
N D 01 4		25.2	19.8	58.0	60.0	0.79	9.8	11.2	44.0	61.0	1.15	15.5	8.6	59.0	61.0	0.56	1229	1159
OH 02 1		17.9	16.3	75.0	142.0	0.91	13.7	11.7	85.0	138.0	0.85	4.2	4.6	63.0	139.5	1.10	97482	65168
OH 02 2		16.7	14.5	71.0	145.0	0.87	12.8	13.5	82.0	127.5	0.82	3.9	4.0	74.5	143.0	1.04	84879	55821
OH 02 3		27.1	28.5	33.0	128.0	1.05	20.3	19.9	59.0	125.0	0.98	6.8	8.6	18.0	117.0	1.27	12051	8794
OH 02 4		9.1	7.2	NA	NA	NA	5.4	3.6	NA	NA	NA	3.6	3.6	NA	NA	NA	552	553
OH 03 1		19.5	14.9	116.0	97.0	0.77	15.2	11.1	140.0	109.0	0.73	4.3	3.8	66.0	60.0	0.89	35827	26695
OH 03 2		18.7	14.2	156.0	135.0	0.76	14.5	10.5	169.0	125.0	0.72	4.1	3.8	116.0	119.0	0.92	34226	25354
OH 03 3		39.2	29.7	154.0	138.0	0.76	31.2	25.7	158.0	154.0	0.82	8.0	4.0	49.0	2.0	0.50	1505	1245
OH 03 4		-	-	NA	NA	NA	-	-	NA	NA	NA	-	-	NA	NA	NA	96	96
OH 04 1		19.6	14.8	121.0	95.0	0.75	14.6	10.6	120.0	87.0	0.73	5.1	4.2	127.0	99.0	0.83	91179	64407
OH 04 2		18.0	13.3	131.0	70.0	0.74	13.5	9.7	108.0	69.0	0.72	4.5	3.6	155.0	99.5	0.81	82160	57343
OH 04 3		35.9	28.1	142.0	120.0	0.78	25.4	18.7	144.0	101.0	0.74	10.5	9.4	113.0	128.0	0.90	8605	6687
OH 04 4		9.7	5.2	NA	NA	NA	4.8	5.2	NA	NA	NA	4.8	-	NA	NA	NA	414	383
OH 05 1		17.3	15.6	59.0	114.0	0.90	12.7	11.3	44.0	113.0	0.89	4.7	4.3	95.5	137.0	0.92	133657	96374
OH 05 2		16.4	14.5	59.0	148.0	0.89	12.2	10.6	50.0	141.0	0.87	4.2	3.9	129.0	138.0	0.94	118997	84340
OH 05 3		26.6	23.8	24.0	60.5	0.89	17.5	16.6	18.0	65.5	0.95	9.1	7.1	86.0	66.0	0.79	13903	11239
OH 05 4		2.6	8.8	NA	NA	NA	1.3	6.3	NA	NA	NA	1.3	2.5	NA	NA	NA	757	795

Infant, neonatal, and postneonatal mortality rates, corresponding ranks, and ratios of change by race: U.S. health service areas (HSA's), 1969-73 and 1974-77—Con.

HSA	R	-----INFANT-----					-----NEONATAL-----					-----POSTNEONATAL-----					BIRTHS	
		RATE		RANK		RATIO	RATE		RANK		RATIO	RATE		RANK		RATIO	1969	1974
		1969 -73	1974 -77	1969 -73	1974 -77	<u>74-77</u> 69-73	1969 -73	1974 -77	1969 -73	1974 -77	<u>74-77</u> 69-73	1969 -73	1974 -77	1969 -73	1974 -77	<u>74-77</u> 69-73	1969 -73	1974 -77
OH	06 1	18.7	15.2	95.0	107.0	0.81	14.6	11.3	122.0	117.0	0.78	4.1	3.9	54.0	59.0	0.94	55638	41025
OH	06 2	18.4	15.2	143.0	174.0	0.82	14.3	11.4	156.0	178.0	0.79	4.1	3.8	115.0	122.0	0.93	53564	39606
OH	06 3	25.8	16.5	17.0	6.0	0.64	21.0	11.5	73.0	9.0	0.55	4.8	4.9	4.0	11.0	1.02	1858	1214
OH	06 4	27.8	4.9	NA	NA	NA	27.8	-	NA	NA	NA	-	4.9	NA	NA	NA	216	205
OH	07 1	18.2	14.5	80.0	79.0	0.80	13.9	11.3	89.0	116.0	0.81	4.3	3.2	74.0	18.0	0.75	68834	51474
OH	07 2	17.3	14.0	97.0	121.0	0.81	13.1	10.9	91.0	160.0	0.83	4.1	3.1	117.0	30.0	0.75	64907	47250
OH	07 3	34.3	23.6	129.0	55.0	0.69	26.6	17.6	150.0	81.0	0.66	7.7	6.0	37.0	23.0	0.77	3757	3014
OH	07 4	17.6	4.8	NA	NA	NA	5.9	4.8	NA	NA	NA	11.8	-	NA	NA	NA	170	210
OH	08 1	17.3	14.5	57.0	78.0	0.84	13.3	10.2	67.0	66.0	0.77	4.0	4.3	50.0	108.0	1.07	55725	36647
OH	08 2	15.2	12.5	24.0	36.5	0.82	11.7	8.7	31.0	26.0	0.74	3.4	3.8	31.0	116.0	1.10	48583	31565
OH	08 3	33.4	28.4	119.0	122.0	0.85	25.0	20.3	138.0	130.0	0.81	8.3	8.1	61.0	102.0	0.97	6830	4829
OH	08 4	3.2	4.0	NA	NA	NA	3.2	4.0	NA	NA	NA	-	-	NA	NA	NA	312	253
OH	09 1	19.4	15.7	114.0	120.0	0.81	14.5	11.8	116.0	145.0	0.82	4.9	3.9	114.0	76.0	0.80	187418	124207
OH	09 2	16.5	13.7	65.0	94.0	0.83	12.6	10.3	73.0	115.0	0.82	3.9	3.3	86.0	56.0	0.86	147127	96232
OH	09 3	30.8	23.7	79.0	59.0	0.77	21.9	17.6	92.0	83.0	0.80	8.8	6.1	77.0	26.0	0.69	38792	26823
OH	09 4	4.0	3.5	2.0	3.0	0.87	3.3	2.6	4.0	5.0	0.78	0.7	0.9	1.0	7.0	1.30	1499	1152
OH	10 1	19.0	15.6	108.0	116.0	0.82	15.0	11.5	134.0	129.0	0.77	4.1	4.1	52.0	90.0	1.00	60597	43847
OH	10 2	17.5	13.9	110.0	113.5	0.79	13.8	10.4	133.0	120.0	0.75	3.7	3.6	55.0	85.5	0.96	53866	38241
OH	10 3	32.2	28.4	100.0	123.0	0.88	24.6	20.3	132.0	129.0	0.83	7.6	8.1	34.0	103.0	1.06	6425	5322
OH	10 4	6.5	3.5	NA	NA	NA	6.5	-	NA	NA	NA	-	3.5	NA	NA	NA	306	284
OKL	01 1	19.1	16.0	110.0	133.0	0.83	14.1	11.0	96.0	105.0	0.78	5.0	5.0	124.5	157.0	0.99	216267	174306
OKL	01 2	18.5	15.2	144.0	175.0	0.82	14.0	10.7	140.0	147.0	0.76	4.5	4.5	154.0	181.0	1.01	179758	141720
OKL	01 3	30.2	25.7	71.0	92.0	0.85	20.2	17.3	56.0	77.0	0.86	10.0	8.4	105.0	111.0	0.84	20569	17086
OKL	01 4	12.0	11.7	38.0	44.0	0.98	7.0	6.6	29.0	41.0	0.95	5.0	5.2	40.0	49.0	1.03	15940	15500
ORG	01 1	16.4	13.5	27.0	44.0	0.82	10.9	8.8	8.0	23.0	0.80	5.4	4.7	144.0	143.0	0.86	73076	59737
ORG	01 2	16.0	13.3	51.0	71.0	0.83	10.8	8.8	8.0	31.0	0.81	5.2	4.5	188.0	179.0	0.87	68686	55286
ORG	01 3	28.5	21.1	55.0	27.0	0.74	18.1	12.8	23.0	19.0	0.71	10.5	8.3	114.0	109.0	0.79	2768	2654
ORG	01 4	9.9	6.7	28.0	20.0	0.68	2.5	2.2	1.0	4.0	0.90	7.4	4.5	46.0	42.0	0.60	1622	1797
ORG	02 1	16.4	13.5	25.0	45.0	0.82	11.6	8.9	16.0	24.0	0.77	4.7	4.6	102.0	134.0	0.97	68974	58785
ORG	02 2	16.6	13.6	67.0	92.0	0.82	11.8	9.0	32.0	38.0	0.76	4.8	4.6	175.0	186.0	0.97	66954	56799
ORG	02 3	6.5	32.9	NA	NA	NA	6.5	21.9	NA	NA	NA	-	11.0	NA	NA	NA	306	365
ORG	02 4	9.3	4.3	25.0	6.0	0.46	6.4	3.7	23.0	10.0	0.58	2.9	0.6	22.0	3.0	0.21	1714	1621
ORG	03 1	19.0	14.7	106.0	92.0	0.77	12.2	9.2	29.0	29.0	0.76	6.8	5.5	189.0	178.0	0.81	22478	19771
ORG	03 2	18.7	13.8	155.0	105.0	0.74	12.2	9.0	51.0	39.0	0.74	6.4	4.8	202.0	193.0	0.74	21278	18775
ORG	03 3	26.3	28.2	NA	NA	NA	8.8	14.1	NA	NA	NA	17.5	14.1	NA	NA	NA	114	71
ORG	03 4	24.9	32.4	57.0	NA	NA	12.0	13.0	52.0	NA	NA	12.9	19.5	57.0	NA	NA	1086	925
PA	01 1	21.0	17.6	154.0	169.0	0.84	16.1	13.7	168.0	188.0	0.85	4.9	4.0	115.0	81.0	0.82	292182	195221
PA	01 2	17.2	14.0	94.0	118.0	0.81	13.6	11.2	118.0	170.0	0.82	3.6	2.8	44.0	16.0	0.78	212158	138921
PA	01 3	31.6	27.0	89.0	107.0	0.85	23.1	23.0	111.0	126.0	0.86	8.5	7.0	66.0	59.0	0.82	77802	55221
PA	01 4	16.7	13.5	44.0	48.0	0.81	13.1	8.2	57.0	48.0	0.63	3.6	5.3	32.0	50.0	1.47	2222	2079

Infant, neonatal, and postneonatal mortality rates, corresponding ranks, and ratios of change by race: U.S. health service areas (HSA's), 1969-73 and 1974-77—Con.

HSA	R	-----INFANT-----					-----NEONATAL-----					-----POSTNEONATAL-----					BIRTHS	
		RATE		RANK		RATIO	RATE		RANK		RATIO	RATE		RANK		RATIO	1969	1974
		1969 -73	1974 -77	1969 -73	1974 -77	74-77 69-73	1969 -73	1974 -77	1969 -73	1974 -77	74-77 69-73	1969 -73	1974 -77	1969 -73	1974 -77	74-77 69-73	-73	-77
PA 02 1		16.3	14.1	24.0	61.0	0.87	12.3	10.9	33.0	98.5	0.88	4.0	3.3	44.5	19.0	0.82	58705	42661
PA 02 2		15.9	13.6	45.0	86.0	0.85	12.0	10.5	45.0	131.0	0.87	3.9	3.1	76.0	29.0	0.83	56645	41954
PA 02 3		31.7	30.6	93.0	144.0	0.96	24.5	22.1	129.0	145.0	0.90	7.2	8.5	29.0	114.0	1.17	1798	1538
PA 02 4		3.8	5.9	NA	NA	NA	3.8	5.9	NA	NA	NA	-	-	NA	NA	NA	262	169
PA 03 1		18.5	14.5	86.0	74.0	0.78	14.5	11.4	115.0	121.5	0.79	4.0	3.1	48.0	8.0	0.77	53891	37187
PA 03 2		18.3	14.2	138.0	132.0	0.78	14.4	11.1	162.0	167.5	0.77	3.9	3.1	83.0	28.0	0.79	53379	36736
PA 03 3		51.1	46.7	NA	NA	NA	29.6	40.5	NA	NA	NA	21.5	6.2	NA	NA	NA	372	321
PA 03 4		-	7.7	NA	NA	NA	-	7.7	NA	NA	NA	-	-	NA	NA	NA	140	130
PA 04 1		15.3	13.3	14.0	38.0	0.87	11.7	9.6	17.0	43.0	0.83	3.6	3.7	17.0	49.5	1.32	102004	73237
PA 04 2		14.5	12.6	9.0	41.0	0.87	11.3	9.1	15.0	44.0	0.81	3.2	3.4	20.0	69.0	1.37	95052	68348
PA 04 3		27.3	25.4	32.0	87.0	0.9	17.7	18.0	20.0	88.0	1.01	9.3	7.5	90.0	80.0	0.81	6592	4288
PA 04 4		2.8	10.3	NA	NA	NA	2.8	8.3	NA	NA	NA	-	1.7	NA	NA	NA	360	601
PA 05 1		19.2	15.5	112.0	113.0	0.8	14.4	12.1	108.5	154.0	0.84	4.8	3.4	106.5	27.0	0.72	52477	36083
PA 05 2		18.9	15.5	161.0	180.0	0.8	14.1	12.1	144.0	191.0	0.86	4.8	3.5	173.0	72.0	0.72	51983	35631
PA 05 3		53.3	26.7	NA	NA	NA	41.4	22.9	NA	NA	NA	8.9	3.8	NA	NA	NA	338	262
PA 05 4		44.9	5.3	NA	NA	NA	44.9	5.3	NA	NA	NA	-	-	NA	NA	NA	156	190
PA 06 1		18.4	15.1	84.0	105.0	0.8	14.5	12.0	112.0	148.0	0.83	3.9	3.2	43.0	12.0	0.80	205344	137511
PA 06 2		16.7	13.8	74.0	107.0	0.8	13.2	11.0	96.0	163.0	0.84	3.5	2.8	39.0	14.0	0.79	185241	123757
PA 06 3		35.6	28.5	140.0	127.0	0.8	27.0	21.4	152.0	141.0	0.79	8.6	7.1	68.0	65.0	0.83	18931	12965
PA 06 4		6.8	3.8	10.0	NA	NA	5.1	2.5	16.0	NA	NA	1.7	1.3	13.0	NA	NA	1172	789
PA 07 1		19.4	15.8	115.0	123.0	0.8	14.7	11.5	125.0	132.0	0.79	4.7	4.3	103.0	135.0	0.91	61138	43325
PA 07 2		18.8	15.8	158.0	185.0	0.8	14.2	11.6	149.0	182.0	0.82	4.6	4.2	161.0	157.0	0.91	58403	41131
PA 07 3		34.9	17.9	134.0	10.0	0.5	26.3	11.2	147.0	7.0	0.43	8.6	6.6	72.0	39.0	0.77	2550	1960
PA 07 4		-	12.8	NA	NA	NA	-	8.5	NA	NA	NA	-	4.3	NA	NA	NA	185	234
PA 09 1		19.8	15.7	123.0	119.0	0.8	15.8	11.6	157.5	135.0	0.74	4.0	4.1	46.0	85.0	1.33	38429	27570
PA 09 2		19.4	15.1	180.0	167.0	0.7	15.5	11.2	193.0	171.0	0.72	3.9	3.8	79.0	126.0	0.99	37749	27090
PA 09 3		45.2	58.4	NA	NA	NA	35.1	38.9	NA	NA	NA	10.0	19.5	NA	NA	NA	598	411
PA 09 4		-	14.5	NA	NA	NA	-	14.5	NA	NA	NA	-	-	NA	NA	NA	82	69
R I 04 1		19.1	14.1	111.0	63.0	0.7	14.9	10.4	132.0	76.0	0.70	4.2	3.8	62.0	57.0	0.89	71580	44545
R I 04 2		18.5	13.4	146.0	79.0	0.7	14.4	9.9	164.0	84.0	0.69	4.1	3.5	106.0	81.0	0.86	67066	41465
R I 04 3		33.0	28.7	114.0	130.0	0.8	24.9	20.5	137.0	133.0	0.82	8.1	8.2	53.0	105.0	1.01	3450	2437
R I 04 4		13.2	4.7	41.0	NA	NA	12.2	1.6	53.0	NA	NA	0.9	3.1	6.0	NA	NA	1064	643
S C 01 1		21.2	18.4	159.0	179.0	0.8	14.5	13.0	119.0	175.0	0.90	6.6	5.4	184.0	177.0	0.82	63634	45754
S C 01 2		17.6	16.2	111.0	191.0	0.9	13.2	11.8	92.0	186.0	0.90	4.4	4.4	149.0	174.0	0.99	47964	34916
S C 01 3		32.3	25.8	103.0	94.0	0.8	18.9	17.0	32.0	72.0	0.90	13.4	8.9	146.0	120.0	0.66	15542	10727
S C 01 4		-	9.0	NA	NA	NA	-	9.0	NA	NA	NA	-	-	NA	NA	NA	128	111
S C 02 1		23.7	17.2	188.0	160.0	0.7	16.3	12.1	174.0	157.0	0.75	7.4	5.1	191.0	164.0	0.59	68768	49978
S C 02 2		18.9	13.4	164.0	74.0	0.7	14.6	10.0	170.0	94.0	0.69	4.4	3.3	144.0	53.0	0.77	42012	29959
S C 02 3		31.4	23.3	86.0	52.0	0.7	19.2	15.5	34.0	45.0	0.81	12.2	7.8	136.0	89.0	0.64	26465	19692
S C 02 4		6.9	3.1	NA	NA	NA	6.9	3.1	NA	NA	NA	-	-	NA	NA	NA	291	327

Infant, neonatal, and postneonatal mortality rates, corresponding ranks, and ratios of change by race: U.S. health service areas (HSA's), 1969-73 and 1974-77—Con.

HSA	R	-----INFANT-----					-----NEONATAL-----					-----POSTNEONATAL-----					BIRTHS	
		RATE		RANK		RATIO	RATE		RANK		RATIO	RATE		RANK		RATIO	1969	1974
		1969 -73	1974 -77	1969 -73	1974 -77	<u>74-77</u> 69-73	1969 -73	1974 -77	1969 -73	1974 -77	<u>74-77</u> 69-73	1969 -73	1974 -77	1969 -73	1974 -77	<u>74-77</u> 69-73	-73	-77
S C 03 1		27.8	24.4	200.0	201.0	0.8	17.6	17.1	196.0	201.0	0.98	10.2	7.2	201.0	201.0	0.71	54602	44282
S C 03 2		19.0	16.4	167.0	192.0	0.8	14.3	12.3	155.0	193.0	0.86	4.7	4.2	166.0	154.0	0.99	28581	21441
S C 03 3		37.6	32.2	149.0	151.0	0.8	21.2	21.9	77.0	143.0	1.03	16.4	10.2	155.0	144.0	0.52	25797	22540
S C 03 4		8.9	6.6	NA	NA	NA	8.9	6.6	NA	NA	NA	-	-	NA	NA	NA	224	301
S C 04 1		19.6	18.5	119.0	181.0	0.9	13.0	12.4	54.0	164.0	0.96	6.6	6.1	183.0	192.0	0.92	59658	46659
S C 04 2		15.6	13.4	37.0	77.0	0.8	11.7	9.9	29.0	80.0	0.84	3.9	3.5	71.0	84.0	0.92	34746	25459
S C 04 3		25.5	25.5	15.0	90.0	1.0	14.8	16.0	8.0	54.0	1.08	10.7	9.5	119.0	129.0	0.89	24395	20571
S C 04 4		9.7	-	NA	NA	NA	7.7	-	NA	NA	NA	1.9	-	NA	NA	NA	517	629
S D 01 1		19.1	17.3	109.0	163.0	0.9	13.4	12.1	73.0	156.0	0.91	5.7	5.2	154.0	171.0	0.91	56314	46153
S D 01 2		17.2	15.4	93.0	178.0	0.9	13.3	11.6	99.0	185.0	0.87	3.8	3.8	67.0	114.0	0.98	49340	39932
S D 01 3		43.7	32.7	NA	NA	NA	43.7	18.7	NA	NA	NA	-	14.0	NA	NA	NA	229	214
S D 01 4		32.5	29.5	64.0	68.0	0.9	12.8	15.1	56.0	68.0	1.19	19.7	14.3	64.0	67.0	0.73	6745	6007
TEN 02 1		19.7	15.3	122.0	111.0	0.7	14.0	10.9	91.0	102.0	0.78	5.7	4.4	159.0	121.0	0.77	58834	42590
TEN 02 2		19.1	14.9	170.0	163.0	0.7	13.5	11.6	109.0	144.0	0.79	5.6	4.2	195.0	166.0	0.76	54896	39820
TEN 02 3		28.6	23.2	56.0	50.0	0.8	20.1	16.1	55.0	58.0	0.80	8.5	7.1	65.0	63.0	0.83	3772	2543
TEN 02 4		24.1	4.4	NA	NA	NA	24.1	-	NA	NA	NA	-	4.4	NA	NA	NA	166	227
TEN 04 1		20.0	14.5	129.0	75.0	0.7	14.9	10.4	131.0	77.0	0.70	5.1	4.1	130.5	96.0	0.80	105982	82916
TEN 04 2		17.8	12.9	118.0	50.0	0.7	13.4	9.3	106.0	52.0	0.69	4.4	3.6	145.0	92.0	0.82	89739	69936
TEN 04 3		33.0	23.7	112.0	58.0	0.7	23.5	16.8	115.0	70.0	0.72	9.5	6.8	97.0	50.0	0.72	15839	12419
TEN 04 4		2.5	7.1	NA	NA	NA	2.5	3.6	NA	NA	NA	-	3.6	NA	NA	NA	404	561
TEN 05 1		23.0	19.3	182.0	189.0	0.8	16.6	14.2	181.0	194.0	0.86	6.4	5.1	178.0	163.0	0.79	32686	24706
TEN 05 2		18.0	14.5	128.0	142.0	0.8	13.8	11.1	128.0	167.5	0.81	4.2	3.3	129.0	51.0	0.79	24088	18324
TEN 05 3		37.1	33.5	144.0	154.0	0.9	24.4	23.4	128.0	150.0	0.96	12.7	10.1	143.0	142.0	0.79	8560	6336
TEN 05 4		26.3	-	NA	NA	NA	26.3	-	NA	NA	NA	-	-	NA	NA	NA	38	46
TEN 06 1		22.6	18.4	180.0	178.0	0.8	17.2	13.6	190.0	185.0	0.79	5.4	4.9	143.0	154.5	0.91	76062	55630
TEN 06 2		17.7	13.9	115.0	111.0	0.7	14.0	10.5	139.0	129.0	0.75	3.7	3.5	56.0	73.0	0.93	38307	26848
TEN 06 3		27.6	22.9	39.0	43.0	0.8	20.5	16.6	64.0	64.0	0.81	7.1	6.3	24.0	29.0	0.88	37435	28419
TEN 06 4		15.6	5.5	NA	NA	NA	12.5	5.5	NA	NA	NA	3.1	-	NA	NA	NA	320	363
TEX 01 1		22.0	19.5	171.0	191.0	0.8	17.0	14.4	189.0	195.0	0.85	5.0	5.1	121.0	162.0	1.02	29003	24118
TEX 01 2		20.6	18.6	194.0	200.0	0.9	16.3	13.9	198.0	200.0	0.85	4.3	4.7	142.0	189.0	1.09	27230	22800
TEX 01 3		44.9	37.9	157.0	156.0	0.8	29.9	26.1	157.0	156.0	0.87	15.0	11.8	152.0	154.0	0.79	1671	1187
TEX 01 4		9.8	-	NA	NA	NA	-	-	NA	NA	NA	9.8	-	NA	NA	NA	102	131
TEX 02 1		25.9	20.2	198.0	196.0	0.7	18.5	14.2	199.0	193.0	0.77	7.4	6.0	192.0	191.0	0.82	33071	25591
TEX 02 2		24.0	19.0	202.0	201.0	0.7	17.7	13.5	199.0	198.0	0.76	6.3	5.5	201.0	199.0	0.86	29979	23189
TEX 02 3		45.4	33.1	158.0	153.0	0.7	27.6	21.8	154.0	142.0	0.79	17.8	11.3	158.0	152.5	0.54	2976	2295
TEX 02 4		8.6	9.3	NA	NA	NA	-	-	NA	NA	NA	8.6	9.3	NA	NA	NA	116	107
TEX 03 1		18.0	14.7	76.0	88.0	0.8	13.5	10.0	76.0	58.0	0.75	4.5	4.6	87.0	138.0	1.03	49873	38927
TEX 03 2		17.7	14.6	114.0	153.0	0.8	13.4	9.9	102.0	82.0	0.74	4.3	4.7	140.0	187.0	1.09	48307	37200
TEX 03 3		34.1	20.8	128.0	23.0	0.6	20.3	16.2	57.0	59.0	0.80	13.8	4.6	150.0	9.0	0.34	1232	1295
TEX 03 4		-	4.6	NA	NA	NA	-	4.6	NA	NA	NA	-	-	NA	NA	NA	334	432

Infant, neonatal, and postneonatal mortality rates, corresponding ranks, and ratios of change by race: U.S. health service areas (HSA's), 1969-73 and 1974-77—Con.

HSA	R	-----INFANT-----					-----NEONATAL-----					-----POSTNEONATAL-----					BIRTHS	
		RATE		RANK		RATIO	RATE		RANK		RATIO	RATE		RANK		RATIO	1969	1974
		1969 -73	1974 -77	1969 -73	1974 -77	74-77 69-73	1969 -73	1974 -77	1969 -73	1974 -77	74-77 69-73	1969 -73	1974 -77	1969 -73	1974 -77	74-77 69-73	-73	-77
TEX 04	1	22.0	17.9	172.5	173.0	0.8	16.3	13.2	173.0	179.0	0.81	5.7	4.7	156.0	145.5	0.82	47687	38168
TEX 04	2	20.8	17.2	196.0	197.0	0.8	15.4	12.9	187.0	196.0	0.84	5.4	4.3	193.0	172.0	0.80	43968	35274
TEX 04	3	38.3	29.5	151.0	136.0	0.7	28.6	18.9	155.0	110.0	0.66	9.7	10.6	101.0	148.0	1.39	3499	2542
TEX 04	4	4.5	2.8	NA	NA	NA	4.5	2.8	NA	NA	NA	-	-	NA	NA	NA	220	352
TEX 05	1	23.8	15.9	149.0	126.0	0.7	15.8	11.5	157.5	130.0	0.73	5.0	4.3	123.0	110.0	0.86	249506	181311
TEX 05	2	18.2	14.1	136.0	124.0	0.7	14.2	10.3	148.0	110.5	0.72	4.0	3.8	103.0	120.0	0.94	201990	144675
TEX 05	3	32.7	23.8	107.0	60.5	0.7	23.3	17.2	112.0	75.0	0.74	9.4	6.5	93.0	35.5	0.70	45998	34979
TEX 05	4	6.6	6.0	7.0	16.0	0.92	3.3	3.0	3.0	8.0	0.92	3.3	3.0	27.0	33.0	0.92	1518	1657
TEX 06	1	21.0	15.0	155.0	99.5	0.71	15.3	10.5	141.0	81.0	0.68	5.8	4.5	160.0	131.0	0.78	94994	79482
TEX 06	2	18.6	13.3	148.0	68.0	0.72	13.8	9.5	129.0	59.0	0.69	4.8	3.8	169.0	118.0	0.79	77926	65017
TEX 06	3	33.8	24.1	122.5	68.0	0.71	23.0	15.7	105.0	47.0	0.68	10.8	8.4	125.0	112.5	0.78	16205	13260
TEX 06	4	5.8	5.8	NA	14.0	NA	4.6	5.0	NA	23.0	NA	1.2	0.8	NA	6.0	NA	863	1205
TEX 07	1	23.3	18.9	185.0	185.0	0.81	16.7	13.5	184.0	183.0	0.80	6.6	5.4	182.0	176.0	0.82	52338	42388
TEX 07	2	19.6	14.8	187.0	160.0	0.76	15.4	10.8	188.0	151.0	0.70	4.2	4.0	127.0	144.5	0.97	36844	31925
TEX 07	3	32.2	30.1	99.0	140.0	0.93	19.9	20.9	49.0	138.0	1.05	12.3	9.2	138.0	123.0	0.75	15378	11342
TEX 07	4	8.6	-	NA	NA	NA	8.6	-	NA	NA	NA	-	-	NA	NA	NA	116	121
TEX 08	1	18.5	14.8	90.0	96.0	0.80	12.8	10.6	49.0	88.0	0.83	5.7	4.2	152.0	98.0	0.74	129039	133597
TEX 08	2	18.4	14.7	142.0	156.0	0.80	12.7	10.6	78.0	137.5	0.83	5.7	4.1	198.0	149.0	0.72	125394	11018
TEX 08	3	24.0	24.1	11.0	66.0	1.00	18.2	14.6	24.0	31.0	0.80	5.8	9.5	10.0	131.0	1.56	3127	2199
TEX 08	4	7.7	5.3	NA	NA	NA	3.9	2.6	NA	NA	NA	3.9	2.6	NA	NA	NA	518	380
TEX 09	1	20.0	14.5	130.0	80.0	0.73	14.9	10.4	133.0	74.0	0.69	5.1	4.2	134.0	97.0	0.82	121656	93268
TEX 09	2	19.2	14.0	174.0	122.0	0.73	14.4	10.0	161.0	91.0	0.70	4.9	4.0	177.0	144.5	0.83	114047	84618
TEX 09	3	33.3	23.4	113.0	54.0	0.71	23.9	16.7	120.0	68.0	0.70	9.1	6.8	87.0	48.0	0.75	6939	4862
TEX 09	4	22.4	14.3	NA	NA	NA	17.9	11.4	NA	NA	NA	4.5	2.5	NA	NA	NA	670	788
TEX 10	1	20.8	20.3	150.0	194.0	0.96	15.8	15.0	156.0	198.0	0.95	5.0	5.0	124.5	161.0	0.99	46429	35776
TEX 10	2	17.9	16.7	126.0	194.0	0.93	14.7	12.9	171.0	195.0	0.88	3.2	3.9	21.0	131.0	1.19	32989	25337
TEX 10	3	28.0	28.5	45.0	125.0	1.02	18.5	20.5	28.0	132.0	1.11	9.5	8.0	98.0	99.0	0.84	13268	10143
TEX 10	4	23.3	6.8	NA	NA	NA	17.4	6.8	NA	NA	NA	5.8	-	NA	NA	NA	172	296
TEX 11	1	19.9	15.9	126.0	131.0	0.80	15.1	11.3	137.0	114.0	0.75	4.8	4.7	109.0	141.0	0.97	228872	191089
TEX 11	2	17.4	13.5	103.0	83.0	0.77	13.6	9.6	115.0	66.0	0.71	3.9	3.9	77.5	130.0	1.00	171983	145645
TEX 11	3	27.6	24.6	40.0	77.0	0.89	19.8	17.1	46.0	73.0	0.86	7.8	7.5	41.0	82.0	0.96	55872	43721
TEX 11	4	13.8	3.5	42.0	4.0	0.25	10.8	1.7	47.0	2.0	0.16	2.9	1.7	23.0	19.0	0.59	1017	1723
TEX 12	1	22.2	20.7	177.0	197.0	0.94	15.8	15.2	154.0	200.0	0.96	6.4	5.6	179.0	182.0	0.86	28932	23953
TEX 12	2	21.1	20.3	197.0	202.0	0.96	15.1	14.7	181.0	202.0	0.98	6.0	5.6	200.0	202.0	0.93	26938	22474
TEX 12	3	38.7	29.5	153.0	137.0	0.76	26.1	24.4	146.0	153.0	0.93	12.5	5.2	141.0	12.0	0.41	1914	1355
TEX 12	4	-	-	NA	NA	NA	-	-	NA	NA	NA	-	-	NA	NA	NA	80	124
UTH 01	1	14.2	11.7	3.0	4.0	0.82	10.4	8.2	4.0	8.0	0.79	3.9	3.5	35.0	34.0	0.91	133828	134782
UTH 01	2	14.0	11.4	3.0	6.0	0.81	10.4	8.1	4.0	11.0	0.78	3.6	3.3	46.0	45.0	0.90	129849	133438
UTH 01	3	25.8	19.2	NA	NA	NA	15.5	12.8	NA	NA	NA	10.3	6.4	NA	NA	NA	776	625
UTH 01	4	20.3	20.4	52.0	64.0	1.01	7.8	8.9	37.0	54.0	1.14	12.5	11.6	55.0	56.0	0.93	3203	3719

Infant, neonatal, and postneonatal mortality rates, corresponding ranks, and ratios of change by race: U.S. health service areas (HSA's), 1969-73 and 1974-77—Con.

HSA	R	-----INFANT-----					-----NEONATAL-----					-----POSTNEONATAL-----					BIRTHS	
		RATE		RANK		RATIO	RATE		RANK		RATIO	RATE		RANK		RATIO	1969	1974
		1969 -73	1974 -77	1969 -73	1974 -77	74-77 69-73	1969 -73	1974 -77	1969 -73	1974 -77	74-77 69-73	1969 -73	1974 -77	1969 -73	1974 -77	74-77 69-73	1969 -73	1974 -77
VT	01 1	16.5	12.5	29.0	19.0	0.76	12.7	9.3	45.0	33.0	0.74	3.8	3.1	28.0	11.0	0.82	38289	27393
VT	01 2	16.5	12.5	66.0	40.0	0.76	12.7	9.4	76.0	57.0	0.74	3.8	3.1	68.0	32.0	0.81	38066	27197
VT	01 3	9.3	-	NA	NA	NA	9.3	-	NA	NA	NA	-	-	NA	NA	NA	107	70
VT	01 4	8.6	7.9	NA	NA	NA	8.6	-	NA	NA	NA	-	7.9	NA	NA	NA	116	126
VA	01 1	20.7	14.6	147.0	85.0	0.70	15.8	10.5	160.0	80.0	0.66	4.9	4.2	119.0	95.0	0.84	44824	33671
VA	01 2	19.1	13.6	169.0	90.0	0.71	15.1	9.8	180.0	76.0	0.65	4.0	3.8	98.0	125.0	0.95	37964	28789
VA	01 3	30.5	21.5	75.0	31.0	0.71	20.5	15.1	63.0	37.0	0.74	10.0	6.5	107.0	34.0	0.65	6694	4646
VA	01 4	12.0	-	NA	NA	NA	-	-	NA	NA	NA	12.0	-	NA	NA	NA	166	236
VA	02 1	16.1	12.7	22.0	25.0	0.79	12.8	9.2	47.0	28.0	0.72	3.3	3.5	6.0	35.0	1.07	81415	55933
VA	02 2	15.3	11.5	30.0	7.0	0.75	12.2	8.1	52.0	8.0	0.66	3.0	3.4	9.0	60.0	1.11	73623	47990
VA	02 3	26.7	23.0	27.0	46.0	0.86	20.1	18.5	53.0	97.0	0.92	6.6	4.5	16.0	6.0	0.69	6510	5946
VA	02 4	8.6	11.3	17.0	41.0	1.28	7.8	7.0	36.0	44.0	0.90	0.8	4.0	4.0	40.0	5.14	1282	1997
VA	03 1	22.1	17.7	175.0	170.0	0.80	16.9	13.2	188.0	180.0	0.78	5.2	4.5	139.0	129.0	0.87	84801	59384
VA	03 2	20.4	16.1	192.0	190.0	0.79	16.0	12.2	196.0	192.0	0.76	4.3	3.9	143.0	133.0	0.89	71515	51305
VA	03 3	32.0	27.1	95.0	110.0	0.84	22.1	18.8	95.0	106.0	0.85	9.9	8.3	103.0	108.0	0.93	13114	8832
VA	03 4	-	8.1	NA	NA	NA	-	8.1	NA	NA	NA	-	-	NA	NA	NA	172	247
VA	04 1	21.5	18.1	163.0	176.0	0.84	16.3	14.0	172.0	191.0	0.86	5.2	4.1	138.0	89.0	0.79	72127	49771
VA	04 2	16.8	13.6	76.0	91.0	0.81	13.4	10.9	105.0	158.0	0.81	3.4	2.7	27.0	12.0	0.81	45044	30313
VA	04 3	29.6	25.4	66.0	88.0	0.86	21.3	19.1	80.0	116.0	0.90	8.3	6.3	59.0	31.0	0.76	26697	18955
VA	04 4	7.8	8.0	NA	NA	NA	5.2	6.0	NA	NA	NA	2.6	2.0	NA	NA	NA	386	503
VA	05 1	21.7	18.6	168.0	183.0	0.86	16.5	13.6	180.0	186.0	0.82	5.2	5.0	137.0	150.0	0.97	110066	82572
VA	05 2	16.2	14.5	54.5	155.0	0.90	12.3	10.5	57.0	132.0	0.85	3.9	4.2	84.0	155.0	1.37	74140	53534
VA	05 3	34.5	27.3	130.0	112.0	0.79	26.3	20.3	148.0	128.0	0.77	8.2	7.0	56.0	51.0	0.85	33896	27006
VA	05 4	9.4	6.4	26.0	18.0	0.68	7.9	5.9	38.0	37.0	0.75	1.5	0.5	9.0	1.0	0.33	2030	2032
WAS	01 1	17.3	14.2	56.0	67.0	0.82	12.2	9.5	31.0	38.0	0.78	5.1	4.7	128.0	148.0	0.93	166838	122898
WAS	01 2	16.5	13.8	62.0	109.0	0.84	11.8	9.3	34.5	51.0	0.79	4.7	4.5	163.0	180.0	0.97	151141	108253
WAS	01 3	30.7	21.1	78.0	26.0	0.69	19.9	13.8	50.0	26.0	0.70	10.8	7.2	124.0	74.0	0.67	7884	6643
WAS	01 4	19.8	13.7	51.0	51.0	0.69	12.4	8.2	55.0	50.0	0.66	7.4	5.5	47.0	52.0	0.74	7813	8002
WAS	02 1	18.5	13.7	87.0	49.5	0.74	13.3	8.7	70.0	19.0	0.65	5.1	5.0	135.0	156.0	0.97	37026	31615
WAS	02 2	18.8	13.8	159.0	101.0	0.73	13.7	8.8	124.0	27.0	0.64	5.1	5.0	186.0	197.0	0.98	35611	30248
WAS	02 3	13.2	-	NA	NA	NA	8.8	-	NA	NA	NA	4.4	-	NA	NA	NA	227	182
WAS	02 4	9.3	13.5	24.0	49.0	1.46	3.4	9.4	6.0	52.0	2.51	5.9	5.1	42.0	48.0	0.96	1188	1185
WAS	03 1	19.0	15.2	107.0	108.0	0.80	12.6	10.1	43.0	59.0	0.80	6.4	5.1	177.0	167.0	0.81	31898	28240
WAS	03 2	18.1	15.0	133.0	164.0	0.83	12.5	13.1	63.0	98.0	0.81	5.6	5.0	196.0	195.5	0.89	29720	26330
WAS	03 3	29.0	18.6	NA	NA	NA	19.3	13.3	NA	NA	NA	9.7	5.3	NA	NA	NA	414	376
WAS	03 4	32.3	16.9	63.0	55.0	0.52	13.6	9.1	60.0	55.0	0.67	18.7	7.8	63.0	58.0	0.42	1764	1534
WAS	04 1	19.8	14.6	124.0	81.0	0.74	14.2	10.0	102.0	57.0	0.71	5.6	4.5	148.0	132.0	0.81	35433	28298
WAS	04 2	19.6	14.5	185.0	150.0	0.74	14.1	10.1	145.0	100.0	0.72	5.4	4.4	194.0	175.0	0.81	33775	26482
WAS	04 3	40.1	24.4	NA	NA	NA	27.4	13.3	NA	NA	NA	12.7	11.1	NA	NA	NA	474	451
WAS	04 4	16.9	11.7	46.0	43.0	0.69	11.0	7.3	48.0	45.0	0.67	5.9	4.4	43.0	41.0	0.74	1184	1365

Infant, neonatal, and postneonatal mortality rates, corresponding ranks, and ratios of change by race: U.S. health service areas (HSA's), 1969-73 and 1974-77—Con.

HSA	R	-----INFANT-----					-----NEONATAL-----					-----POSTNEONATAL-----					BIRTHS	
		RATE		RANK		RATIO	RATE		RANK		RATIO	RATE		RANK		RATIO	1969	1974
		1969 -73	1974 -77	1969 -73	1974 -77	74-77 69-73	1969 -73	1974 -77	1969 -73	1974 -77	74-77 69-73	1969 -73	1974 -77	1969 -73	1974 -77	74-77 69-73	-73	-77
W V	01 1	21.1	17.1	157.0	159.0	0.81	16.3	12.6	170.0	168.0	0.78	4.8	4.5	110.0	125.5	0.93	147801	114644
W V	01 2	20.6	16.8	195.0	195.0	0.82	15.9	12.4	194.0	194.0	0.78	4.7	4.5	164.0	176.0	0.95	141386	109720
W V	01 3	33.8	25.6	124.0	91.0	0.76	24.8	19.8	136.0	124.0	0.80	9.1	5.8	85.0	21.0	0.64	5854	4493
W V	01 4	5.3	2.3	NA	NA	NA	3.6	2.3	NA	NA	NA	1.8	-	NA	NA	NA	561	431
WIS	01 1	15.1	12.0	11.0	8.0	0.79	11.2	8.3	11.0	10.0	0.74	3.9	3.6	42.0	46.0	0.93	61477	45033
WIS	01 2	15.1	11.9	21.0	15.0	0.78	11.3	8.3	16.0	15.0	0.74	3.9	3.6	70.0	91.0	0.93	59965	43687
WIS	01 3	19.1	18.6	NA	NA	NA	12.7	11.2	NA	NA	NA	6.4	7.4	NA	NA	NA	944	807
WIS	01 4	7.0	9.3	NA	NA	NA	-	5.6	NA	NA	NA	7.0	3.7	NA	NA	NA	568	539
WIS	02 1	16.8	12.5	40.0	21.0	0.74	12.1	8.5	28.0	15.0	0.70	4.7	4.0	97.0	82.0	0.86	139593	101265
WIS	02 2	15.2	11.1	26.0	3.0	0.73	11.1	7.8	13.0	1.0	0.70	4.0	3.4	102.0	61.0	0.84	120090	85383
WIS	02 3	28.0	21.1	44.0	25.0	0.75	19.2	13.2	37.0	22.0	0.69	8.8	7.8	76.0	90.0	0.89	18283	14469
WIS	02 4	10.7	6.4	32.0	17.0	0.60	4.1	4.2	11.0	14.0	1.04	6.6	2.1	44.0	25.0	0.32	1220	1413
WIS	03 1	14.5	13.1	6.0	35.0	0.90	10.7	9.8	6.0	50.0	0.91	3.7	3.3	23.0	22.0	0.99	34714	26501
WIS	03 2	14.6	13.1	11.0	57.0	0.90	10.8	9.8	7.0	75.0	0.90	3.8	3.3	63.0	49.0	0.88	34368	26156
WIS	03 3	-	87.0	NA	NA	NA	-	43.5	NA	NA	NA	-	43.5	NA	NA	NA	46	23
WIS	03 4	3.3	6.2	NA	NA	NA	3.3	6.2	NA	NA	NA	-	-	NA	NA	NA	300	322
WIS	04 1	16.5	12.5	31.0	22.0	0.76	12.2	9.0	32.0	25.0	0.74	4.3	3.5	71.0	30.0	0.81	37160	29528
WIS	04 2	16.5	12.4	63.0	33.0	0.75	12.2	9.2	53.0	45.0	0.75	4.2	3.2	134.5	41.5	0.77	36296	28653
WIS	04 3	-	22.2	NA	NA	NA	-	22.2	NA	NA	NA	-	-	NA	NA	NA	52	45
WIS	04 4	20.9	14.5	NA	NA	NA	13.5	2.4	NA	NA	NA	7.4	12.0	NA	NA	NA	812	830
WIS	05 1	14.4	14.5	5.0	77.0	1.01	10.8	11.0	7.0	103.0	1.02	3.7	3.5	20.0	38.0	0.97	41905	32178
WIS	05 2	14.4	14.5	7.0	147.0	1.01	10.8	11.0	6.0	162.0	1.02	3.7	3.5	49.5	82.0	0.96	41571	31798
WIS	05 3	40.0	20.8	NA	NA	NA	20.0	-	NA	NA	NA	20.0	20.8	NA	NA	NA	50	48
WIS	05 4	7.0	12.0	NA	NA	NA	7.0	9.0	NA	NA	NA	-	3.0	NA	NA	NA	284	332
WIS	06 1	15.0	12.7	9.0	27.0	0.85	11.5	9.2	14.0	30.0	0.80	3.6	3.5	13.5	36.0	0.98	27659	22131
WIS	06 2	15.1	12.7	22.0	44.0	0.84	11.6	9.3	26.0	53.0	0.81	3.6	3.4	43.0	63.0	0.96	27271	21742
WIS	06 3	-	-	NA	NA	NA	-	-	NA	NA	NA	-	-	NA	NA	NA	34	29
WIS	06 4	8.5	13.9	NA	NA	NA	2.8	2.8	NA	NA	NA	5.6	11.1	NA	NA	NA	354	360
WYO	01 1	23.1	15.8	183.0	124.0	0.69	18.1	10.7	198.0	93.0	0.59	4.9	5.1	116.0	168.0	1.05	30702	29174
WYO	01 2	22.7	15.9	200.0	189.0	0.70	18.0	13.9	200.0	154.0	0.60	4.7	5.0	165.0	198.0	1.08	29256	27919
WYO	01 3	50.6	15.6	NA	NA	NA	38.0	12.5	NA	NA	NA	12.7	3.1	NA	NA	NA	395	320
WYO	01 4	22.8	13.9	53.0	NA	NA	14.3	5.3	62.0	NA	NA	8.6	8.6	49.0	NA	NA	1051	935
INT	02 1	21.5	15.8	164.0	122.0	0.73	15.4	10.8	146.0	94.0	0.70	6.1	5.1	172.0	165.0	0.83	47762	35506
INT	02 2	19.0	14.5	168.0	144.0	0.76	13.9	9.7	136.0	68.0	0.69	5.1	4.8	185.0	132.0	0.94	40754	30684
INT	02 3	37.2	24.8	145.0	82.0	0.67	24.7	18.0	133.0	89.0	0.73	12.5	6.8	140.0	51.5	0.55	6810	4672
INT	02 4	5.1	13.3	NA	NA	NA	5.1	6.7	NA	NA	NA	-	6.7	NA	NA	NA	198	150
INT	03 1	20.5	16.3	144.0	143.0	0.80	13.3	11.4	69.0	120.0	0.85	7.2	5.0	190.0	159.0	0.59	53830	39705
INT	03 2	15.4	13.6	35.0	87.0	0.88	11.6	9.9	24.0	81.0	0.85	3.9	3.7	72.5	108.0	0.96	33168	23006
INT	03 3	29.1	20.5	59.0	21.0	0.70	16.4	13.6	13.0	24.0	0.83	12.8	6.9	144.0	56.0	0.54	20314	16275
INT	03 4	5.7	7.1	NA	NA	NA	-	7.1	NA	NA	NA	5.7	-	NA	NA	NA	348	424

Infant, neonatal, and postneonatal mortality rates, corresponding ranks, and ratios of change by race: U.S. health service areas (HSA's), 1969-73 and 1974-77--Con.

HSA	R	-----INFANT-----					-----NEONATAL-----					-----POSTNEONATAL-----					BIRTHS	
		RATE		RANK		RATIO	RATE		RANK		RATIO	RATE		RANK		RATIO	1969	1974
		1969 -73	1974 -77	1969 -73	1974 -77	<u>74-77</u> 69-73	1969 -73	1974 -77	1969 -73	1974 -77	<u>74-77</u> 69-73	1969 -73	1974 -77	1969 -73	1974 -77	<u>74-77</u> 69-73	-73	-77
INT 04 1		23.9	18.9	189.0	186.0	0.79	16.0	12.4	154.0	162.0	0.78	7.9	6.6	196.0	197.0	0.93	73766	52118
INT 04 2		18.7	14.4	157.0	141.0	0.77	14.7	10.3	175.0	114.0	0.70	4.0	4.1	92.0	153.0	1.05	42445	28247
INT 04 3		31.3	24.8	85.0	81.0	0.79	17.8	15.2	22.0	39.0	0.85	13.5	9.6	148.0	134.0	0.71	30874	23357
INT 04 4		2.2	-	NA	NA	NA	2.2	-	NA	NA	NA	-	-	NA	NA	NA	447	514
INT 05 1		17.5	13.5	63.0	43.0	0.77	14.0	10.4	92.0	75.0	0.74	3.6	3.1	13.5	9.0	0.87	192227	145995
INT 05 2		17.3	13.2	100.5	62.0	0.76	13.9	10.2	134.0	102.0	0.73	3.5	3.0	38.0	25.0	0.97	187348	141950
INT 05 3		30.4	29.9	73.0	139.0	0.98	21.2	23.1	76.0	149.0	1.09	9.2	6.8	89.0	51.5	0.74	3587	2774
INT 05 4		11.6	7.9	37.0	30.0	0.68	10.1	4.7	45.0	18.0	0.47	1.5	3.1	11.0	34.0	2.03	1292	1271
INT 06 1		18.9	15.2	98.0	106.0	0.80	14.2	11.3	103.0	115.0	0.79	4.6	3.9	93.0	73.0	0.83	61351	45210
INT 06 2		17.5	14.1	104.0	125.0	0.81	13.4	10.7	103.0	148.0	0.80	4.1	3.3	105.0	54.0	0.82	55593	43728
INT 06 3		35.0	28.3	135.0	121.0	0.81	24.3	18.3	126.0	96.0	0.75	10.7	9.9	120.0	141.0	0.93	5052	3823
INT 06 4		14.2	6.1	NA	NA	NA	7.1	4.6	NA	NA	NA	7.1	1.5	NA	NA	NA	706	659
INT 07 1		19.9	14.7	127.0	91.0	0.74	15.5	11.9	149.0	101.0	0.70	4.4	3.8	82.0	63.0	0.85	35300	27684
INT 07 2		19.3	14.2	179.0	129.0	0.73	15.1	10.5	182.0	126.0	0.69	4.2	3.7	132.0	107.0	0.88	33181	25720
INT 07 3		30.5	24.7	76.0	79.0	0.81	21.7	18.9	85.0	112.0	0.87	8.8	5.7	75.0	19.0	0.65	1933	1743
INT 07 4		16.1	-	NA	NA	NA	16.1	-	NA	NA	NA	-	-	NA	NA	NA	186	221
INT 08 1		17.2	13.9	53.0	53.0	0.80	12.9	10.1	52.0	60.0	0.78	4.3	3.8	73.0	59.0	0.87	147045	104453
INT 08 2		16.0	12.9	50.0	52.0	0.81	12.3	9.6	55.0	63.0	0.78	3.7	3.4	59.0	57.0	0.90	127338	93028
INT 08 3		26.0	20.3	18.0	20.0	0.78	17.6	13.6	19.0	23.0	0.77	8.4	6.7	63.0	43.0	0.80	19055	13851
INT 08 4		1.5	3.5	NA	NA	NA	-	3.5	NA	NA	NA	1.5	-	NA	NA	NA	652	574
INT 09 1		16.4	15.9	28.0	130.0	0.97	12.6	12.2	40.0	159.0	0.97	3.8	3.7	27.0	52.0	1.98	25198	20649
INT 09 2		16.1	15.1	53.0	171.0	0.94	12.8	11.9	79.0	188.0	0.93	3.4	3.2	26.0	36.0	0.95	22611	18187
INT 09 3		5.2	19.7	NA	NA	NA	-	19.7	NA	NA	NA	5.2	-	NA	NA	NA	192	203
INT 09 4		19.6	22.1	50.0	66.0	1.13	11.7	13.7	51.0	65.0	1.17	7.9	8.4	48.0	60.0	1.06	2395	2259
INT 10 1		17.7	14.0	67.0	57.0	0.79	13.7	9.9	83.0	55.0	0.73	4.1	4.0	51.0	83.0	0.99	32881	26134
INT 10 2		17.6	14.2	113.0	133.0	0.81	13.7	10.2	125.0	109.0	0.75	3.9	4.0	91.0	142.0	1.32	31802	24760
INT 10 3		13.5	8.6	NA	NA	NA	13.5	-	NA	NA	NA	-	8.6	NA	NA	NA	148	116
INT 10 4		21.5	9.5	NA	37.0	NA	11.8	5.6	NA	32.0	NA	9.7	4.0	NA	39.0	NA	931	1258
INT 11 1		15.2	12.8	12.0	29.0	0.84	11.9	9.8	23.0	51.0	0.83	3.4	3.0	7.0	7.0	0.99	27509	22560
INT 11 2		15.4	12.8	34.0	48.0	0.83	11.9	9.9	39.0	83.0	0.83	3.4	2.9	32.0	21.0	0.84	27031	22031
INT 11 3		-	25.6	NA	NA	NA	-	-	NA	NA	NA	-	25.6	NA	NA	NA	24	39
INT 11 4		8.8	12.2	NA	NA	NA	8.8	6.1	NA	NA	NA	-	6.1	NA	NA	NA	454	490
INT 12 1		18.2	15.6	79.0	115.0	0.86	13.4	11.4	72.0	123.0	0.85	4.8	4.2	106.5	100.0	0.88	114156	80866
INT 12 2		16.2	13.2	56.0	63.0	0.82	12.1	9.6	49.0	64.0	0.79	4.1	3.6	112.0	98.0	0.88	94165	65439
INT 12 3		28.4	27.3	51.0	111.0	0.96	20.1	20.1	52.0	127.0	1.00	8.3	7.2	57.0	58.0	0.86	19109	14403
INT 12 4		4.5	4.9	NA	7.0	NA	2.3	2.9	NA	7.0	NA	2.3	2.0	NA	23.0	NA	882	1024
INT 13 1		20.1	16.4	132.0	144.0	0.81	15.5	11.8	147.0	146.0	0.77	4.7	4.5	95.5	130.0	0.96	201524	143236
INT 13 2		16.5	12.8	64.0	45.0	0.77	13.0	9.5	86.0	58.0	0.73	3.5	3.3	41.0	46.0	0.94	150871	102957
INT 13 3		31.4	27.3	87.0	108.0	0.86	23.0	18.9	108.0	111.0	0.82	8.4	8.1	62.0	104.0	0.97	49473	36054
INT 13 4		10.2	4.9	30.0	8.0	0.4	9.3	4.1	41.0	13.0	0.44	0.8	0.8	5.0	4.0	0.96	1180	1225

Infant, neonatal, and postneonatal mortality rates, corresponding ranks, and ratios of change by race: U.S. health service areas (HSA's), 1969-73 and 1974-77—Con.

HSA	R	-----INFANT-----					-----NEONATAL-----					-----POSTNEONATAL-----					BIRTHS	
		RATE		RANK		RATIO	RATE		RANK		RATIO	RATE		RANK		RATIO		
		1969	1974	1969	1974	<u>74-77</u>	1969	1974	1959	1974	<u>74-77</u>	1969	1974	1969	1974	<u>74-77</u>			1969	1974
-73	-77	-73	-77	69-73	-73	-77	-73	-77	69-73	-73	-77	-73	-77	69-73	-73	-77		
INT 14	1	18.6	13.8	91.0	51.5	0.7	14.2	10.2	104.0	63.0	0.71	4.3	3.6	75.0	40.0	0.92	36563	24932
INT 14	2	18.6	13.7	150.0	100.0	0.7	14.3	10.2	150.0	104.0	0.72	4.3	3.5	141.0	83.0	0.92	35952	24398
INT 14	3	27.2	20.2	NA	NA	NA	19.8	11.5	NA	NA	NA	7.4	8.6	NA	NA	NA	405	347
INT 14	4	4.9	5.3	NA	NA	NA	-	5.3	NA	NA	NA	4.9	-	NA	NA	NA	206	187
INT 15	1	19.3	15.3	113.0	109.0	0.7	15.5	11.4	148.0	119.0	0.73	3.8	3.9	33.0	77.0	1.32	37402	25269
INT 15	2	19.3	15.3	166.0	165.0	0.7	15.3	11.3	186.0	175.0	0.74	3.7	3.8	54.0	117.0	1.33	36330	24585
INT 15	3	33.3	26.1	NA	NA	NA	23.2	15.3	NA	NA	NA	10.1	9.8	NA	NA	NA	990	614
INT 15	4	-	-	NA	NA	NA	-	-	NA	NA	NA	-	-	NA	NA	NA	82	70

Symbols

NA Not applicable
Quantity zero
0.0 Quantity more than 0 but less than 0.05

Statistical Notes for Health Planners is a cooperative activity of the National Center for Health Statistics and the Bureau of Health Planning, Health Resources Administration.

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